

Rail Welding Equipment



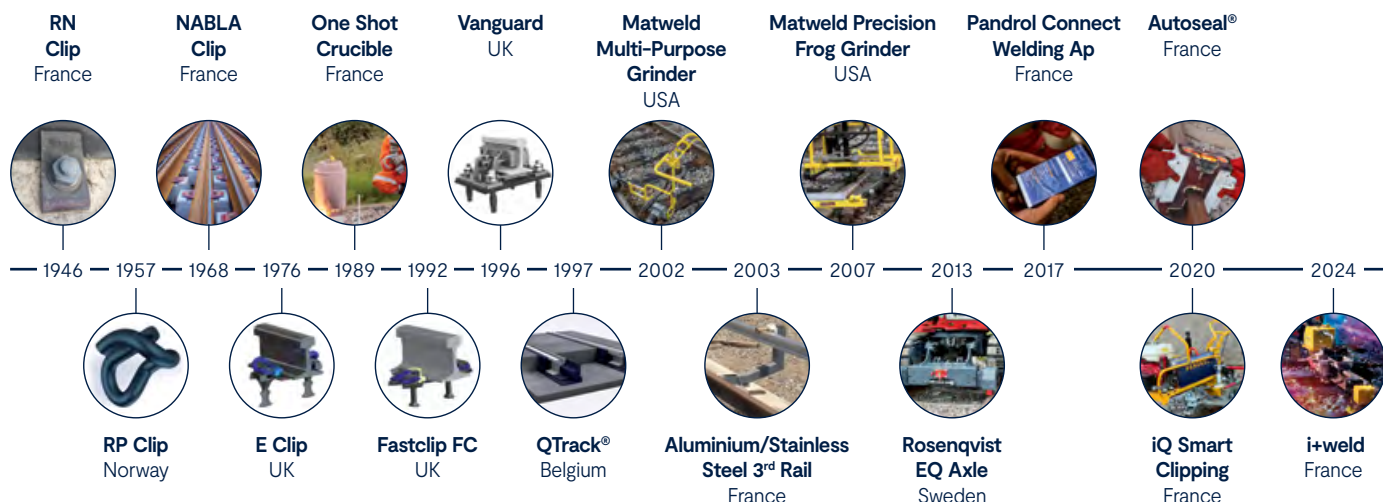
Partners in Excellence

Pandrol defines the industry standard across rail fastening systems and aluminothermic welding. We have created rail infrastructure in more than 100 countries with our products and services extending to designing, developing and manufacturing equipment to make constructing and maintaining railways more efficient. That means we have experienced just about every situation, problem, question and solution before.

Our Story

Part of the Delachaux Group, Pandrol is a business founded on a passion for innovation, and our unique heritage is still at the heart of how we do business today. Over 100 years of product development, engineering know-how, acquisitions and growth has enabled us to become a world leader and global employer with over 1700 team members across 40 locations.

In 2017, all the businesses within the rail division of the Delachaux Group were united under the single brand of Pandrol, including Railtech – specialist in welding equipment and electrification solutions – , Vortok – specialist in rail equipment – , Pandrol CDM Track, Rosenqvist Rail, Matweld, RSS and fastenings systems solution company Pandrol.



i+weld
by **PANDROL**



Pandrol has developed a global solution for a revolutionary aluminothermic welding solution: i+weld. Based on automation and data. i+weld represents the future of rail welding, offering enhanced control and improved traceability of the welding process while maintaining the flexibility that rail networks demand. Discover how i+weld can transform your rail operations with superior quality, safety, and efficiency.

YESTERDAY. TODAY. TOMORROW.

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We refurbish and rebuild all of our equipment to factory specifications and according to our strict manufacturing standards. We offer our complete inventory at factory-direct pricing and test all tools to ensure safe and reliable operation.

We can offer hydraulic safety training as well as equipment and hydraulic power source diagnostics. Our representatives have the capabilities necessary to meet you on-site to troubleshoot your power source and to help make recommendations to keep you operating with minimum equipment down time and increased reliability.

Contact us to coordinate your equipment repairs and diagnostics.

1



Power units



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00100K - DUAL CIRCUIT POWER UNIT

The 00100K Dual Circuit Power Unit is designed to deliver two 5 gpm or one 10 gpm circuits at 2000 psi. A power unit-mounted hose reel, with a 50 foot hose, is available, as well as various carts and provisions to move the machine manually or power assisted.

ACCESSORIES:

- **00187 - Kit- 00100K Lift Handle Kit**
- **00195 - Power Point**
- **02326 - Hose Reel with 50' hose and mounting bracket**
- **06300 - Power Unit Mobility Cart**
- **06327 - Power Unit Mobility Kit**
- **06600 - Power Unit Transport Cart**

Technical data	
Engine	23hp KOHLER Fuel: Gasoline 4 US gal (15.14L) Start: Electric 12V
Hydraulics	(2) 5 gpm (19 lpm) or (1) 10 gpm (38 lpm) Fluid: Hydraulic 5 US gal (18.9L) 2000 psi (140 bar)
Dimensions	A: 37" (94.0cm) / B: 24" (60.9cm) / C: 27" (68.5cm)
Weight	321 lbs (145.6 kg)



02900A - Diesel POWER UNIT

The 02900A Diesel Power Unit can be optionally equipped with catalytic converter, mobility kit and mounted hose reel. Engine protection devices are installed to protect the engine from low oil and high temperature.

ACCESSORIES:

- **02326 - Hose Reel with 50' hose and mounting bracket**
- **02900C - w/Catalytic Converter**
- **02998 - Power Unit Lift Handle Kit**
- **06100 - Tamper Cart w/ 2 hose reels**

Technical data	
Engine	18hp KUBOTA Fuel: Diesel 4 US gal (15.14L) Start: Electric 12V
Hydraulics	(2) 5 gpm (19 lpm) or (1) 10 gpm (38 lpm) Fluid: Hydraulic 5 US gal (18.9L) 2000 psi (140 bar)
Dimensions	A: 38" (96.5cm) / B: 24" (70cm) / C: 36" (91.4cm)
Weight	465 lbs (210 kg)



02050RM - MODULAR POWER UNIT

The 02050RM Modular Power Unit is designed to be easily transported in two lightweight sections and it simply couples together for immediate use. It delivers 9 gpm of flow which will operate all critical hydraulic tools. Where size and weight are primary concerns, this unit is perfect for the job. Two compact sections allow for ease of getting into tight work locations while being lightweight and safe for operators to carry to the work site.

Technical data	
Engine	14hp KHOLER Fuel: Gasoline 7.4 QTS (7.0 L) Start: Pull
Hydraulics	(1) 9 gpm (34 lpm) Fluid: Hydraulic 3.5 US gal (13.2L) 2000 psi (140 bar)
Dimensions	A: 29½" (74.9cm) / B: 23½" (59.6cm) / C: 25" (63.5cm)
Weight	165lbs (74 kg)
Engine module weight	100lbs (45 kg)
weight hydraulic tank module	65lbs (27 kg)



03000 - Hydraulic MANIFOLD

The 03000 Hydraulic Manifold Circuit is a self contained flow and directional control assembly. The manifold can be installed on any vehicle which is already equipped with a hydraulic system capable of producing at least 10 gpm at 2000 psi. The manifold can be installed and takes up very little space. The manifold circuit provides a safe and cost effective way of adding hydraulic tool capabilities to your existing fleet of equipment.

Technical data	
Pressure	2000 psi (140 bar)
Flow	(2) 5 gpm (19 lpm) or (1) 10 gpm (38 lpm)
Dimensions	A: 18¾" (47.6cm) / B: 7" (17.8cm) / C: 8½" (21.6cm)
Weight	31 lbs (14 kg)



06300 - POWER UNIT MOBILITY CART

The 06300 Mobility Cart is lightweight and highly versatile, it is simple to set-up and allows the operator to easily maneuver a power unit both on and off the rail. It can also be used as a tool trolley when no power unit is secured to it. The handles and rollers on this unit collapse for compact storage.

Technical data

Dimensions	29" (73.6cm) / 39" (99cm) / 18¼" (46.3cm)
Weight	96 lbs (43.5 kg)



2



Grinders

NB: Grinders DO NOT include grinding stones and may need to be ordered separately, unless otherwise specified.



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09200A – PRECISION FROG Grinder

The 09200A Precision Frog Grinder is a hydraulic powered, track mounted machine that provides a precision guide-frame with multiple axis adjustment enabling the operator to make consistent refinishing grinds.

ACCESSORIES:

- 00499 – 8" x 1" x 5/8" Grinding Stone
- 09295 – 2' Rail Kit
- 09299 – 4" x 3" x 5/8-11 Cup Grinding Stone
- 09290 – 2" Stone Adaptor Kit
- 09295 – Rail and 2" Adaptor Kit
- 09298 – 2" x 8" x 1" Stone

Technical data	
Flow	10 gpm (38 lpm)
Pressure	2000 psi (140 bar)
RPM	4000
Dimensions	Grinder: L: 17" / W: 35" / H: 32" Base: L: 57½" / W: 40" / H: 8"
Weight	Base: 46 lbs (20.8 kg) Grinder: 88 lbs (39.9 kg) Overall: 134 lbs (60.8 kg)



06000B – PROFILE Grinder

The 06000 Profile Grinder is a lightweight, precision grinding machine. The grinder is designed specifically for finish grinding of field welds and will grind the top and sides of the rail to the original profile.

ACCESSORIES:

- 02199 – 6" x 3" x 5/8" Grinding Stone

Technical data	
Flow	10 gpm (38 lpm)
Pressure	2000 psi (140 bar)
RPM	4000
Dimensions	A: 34½" (87.63cm) / B: 20" (51cm) / C: 32" (81.3cm)
Weight	67 lbs (30.4 kg)



06950 – TST MULTI-PURPOSE Grinder

The 06950 TST Multi-Purpose Grinder allows operators to remain in an ergonomic upright position while performing field weld grinding. The adjustable rear handle positions easily for the operators preferred height and comfort or lowered and swiveled around for compact storage.

ACCESSORIES:

- **00499 – 8" x 1' x 5/8" Grinding Stone**

Technical data	
Flow	10 gpm (38 lpm)
Pressure	2000 psi (140 bar)
RPM	4000
Dimensions	A: 40" (101.6cm) / B: 22" (55.9cm) / C: 34" (86.4cm)
Weight	43 lbs (19.5 kg)



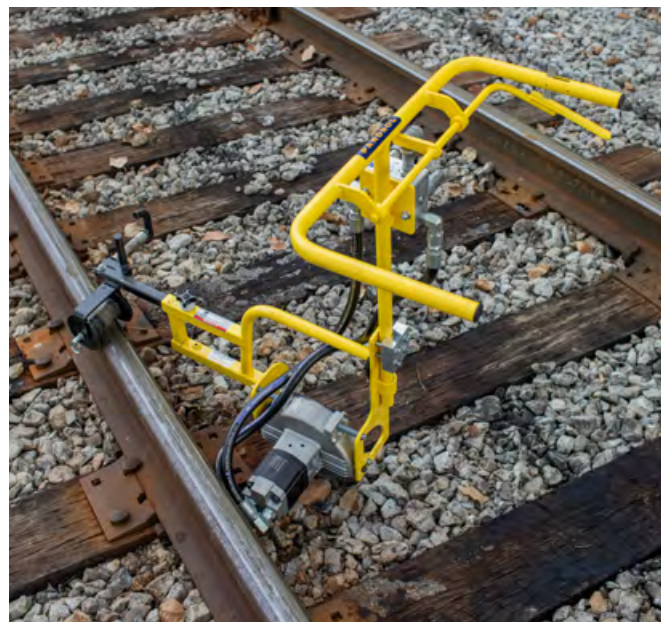
06950 – MULTI-PURPOSE Grinder

The 06950 Multi-Purpose Grinder allows operators to remain in an ergonomic upright position while performing multiple grinding tasks. Lightweight, and with adjustable positions for the grinding head and rail guide, field welds, switch points and frogs can be easily ground with this one tool. The adjustable rear handle positions easily for the operators preferred height and comfort or lowered and swiveled around for compact storage.

ACCESSORIES:

- **00499 – 8" x 1' x 5/8" Grinding Stone**
- **06940– Housing Rotation Locking Unit**

Technical data	
Flow	10 gpm (38 lpm)
Pressure	2000 psi (140 bar)
RPM	4000
Dimensions	A: 40" (101.6cm) / B: 24" (60.7cm) / C: 34" (86.4cm)
Weight	52 lbs (23.6 kg)



05900 – FROG / PROFILE Grinder 05950 – FROG / PROFILE Grinder W/ TRIGGER

The 05900 / 05950 Frog/Profile Grinder is a lightweight, precision grinding machine. The grinder is designed for frog and finish grinding of field welds. The roll-over feature makes ergonomic grinding of the rail to the original profile easy. An optional detachable Frog Grinding Outrigger is available for grinding Frogs. The flaptype spark guard prevents sparks from being discharged on adjacent combustible material.

ACCESSORIES:

- **02199 – Grinding Stone**
- **05999 – Grinding Outrigger**

Technical data	
Flow	10 gpm (38 lpm)
Pressure	2000 psi (140 bar)
RPM	4000
Dimensions	A: 40" (101.6cm) / B: 16" (40.6cm) / C: 34" (86.4cm)
Weight	85 lbs (38.5 kg)



00700 / 00700C – SURFACING GUIDE Grinder

The 00700 / 00700C Surfacing Guide is a rugged but lightweight grinding tool designed specifically for grinding the top of the rail. It is excellent for the finish grinding of field welds or rail end repairs. The extended guard offers excellent protection for the operator.

Note: Model 00700C has factory installed Type 6 Stone Adaptor (00733-Kit) for use exclusively for a type 6 stone (00797).

ACCESSORIES:

- **00733-Kit – Type 6 Stone Adaptor**
- **00797 – Type 6 Stone 8" x 2" x 1½"**
- **00799 – 8" x 2" x 4" Cup Stone (exclusive use with model 00700)**

Technical data	
Flow	10 gpm (38 lpm)
Pressure	2000 psi (140 bar)
RPM	4000
Dimensions	A: 39" (99cm) / B: 12" (30.5cm) / C: 26" (66cm)
Weight	75 lbs (34 kg)



STRAIGHT STONE Grinder
04600 – CW ROTATION
04700 – CCW ROTATION
04650 – CW ROTATION W/ TRIGGER
04750 – CCW ROTATION W/ TRIGGER

The 04600 / 4700 Straight Stone Grinder is a powerful and safe grinding tool for use on field welds, frogs, switch points, etc. The tool has an on-off valve or trigger, high strength aluminum housing and rigid handles for safe use by the operator.

NOTE: Rotation direction is determined by looking directly at the face of the installed grinding stone.

ACCESSORIES:

- **00499 – 8" x 1" x 5/8" Grinding Stone**
- **046009 – 1" Stone Adaptor**
- **046015 – Slotting Guide Kit**

Technical data	
Flow	10 gpm (38 lpm)
Pressure	2000 psi (140 bar)
RPM	4000
Dimensions	A: 21" (53.3cm) / B: 8" (20.3cm) / C: 7½" (19cm)
Weight	20 lbs (9 kg)



04800 – 6" CUP STONE Grinder W/ ON/OFF VALVE
04850 – 6" CUP STONE Grinder W/ SAFETY TRIGGER

The 04800 Cup Stone Grinder is designed for grinding the tops of frogs and rail. The unique stone adjustment feature allows the operator to easily adjust the guard as the stone wears, without the need for wrenches. The wrap around handle design gives the operator complete control of the tool.

ACCESSORIES:

- **02199 – 6" x 3" x 5/8" Grinding Stone**

Technical data	
Flow	10 gpm (38 lpm)
Pressure	2000 psi (140 bar)
RPM	4000
Dimensions	A: 9¾" (24.77cm) / B: 10" (25.4cm) / C: 11½" (29.2cm)
Weight	26 lbs (11.8 kg)



00600 - 8" CUP STONE Grinder

The 00600 8" Cup Stone Grinder is designed for use in grinding the tops of frogs and rail. The unique stone adjustment feature allows the operator to easily adjust the guard as the stone wears without the need for wrenches. The double handles give the operator complete control of the tool.

Note: Model 00600C has factory installed Type 6 Stone Adaptor (00733-Kit) for use exclusively for a type 6 stone (00797).

ACCESSORIES:

- **00799 - 8" x 2" x 4" Plate Mounted Cup Stone**
(exclusive use with the model 00600)
- **00733-KIT - Type 6 Stone Adapter Kit**
- **00797 - 8" x 2" x 1½" Type 6 Stone**

Technical data	
Flow	10 gpm (38 lpm)
Pressure	2000 psi (140 bar)
RPM	4000
Dimensions	A: 16½" (41.9cm) / B: 10" (25.4cm) / C: 9" (22.9cm)
Weight	28 lbs (12.7 kg)



09300 - HEAD WASH Grinder (HWG)

The 09300 Head-Wash Grinder (HWG) is a hydraulic powered, track mounted machine that is designed to efficiently grind the ball of the rail in preparation for the Head-Wash Repair Weld (HWR). This specially designed grinder provides a precision grind to compliment the HWR process in defect removal. The compact and lightweight grinder allows for quick set-up and breakdown on track while the ergonomic profile allows the operator to quickly and comfortably grind the ball to the appropriate depth and width.

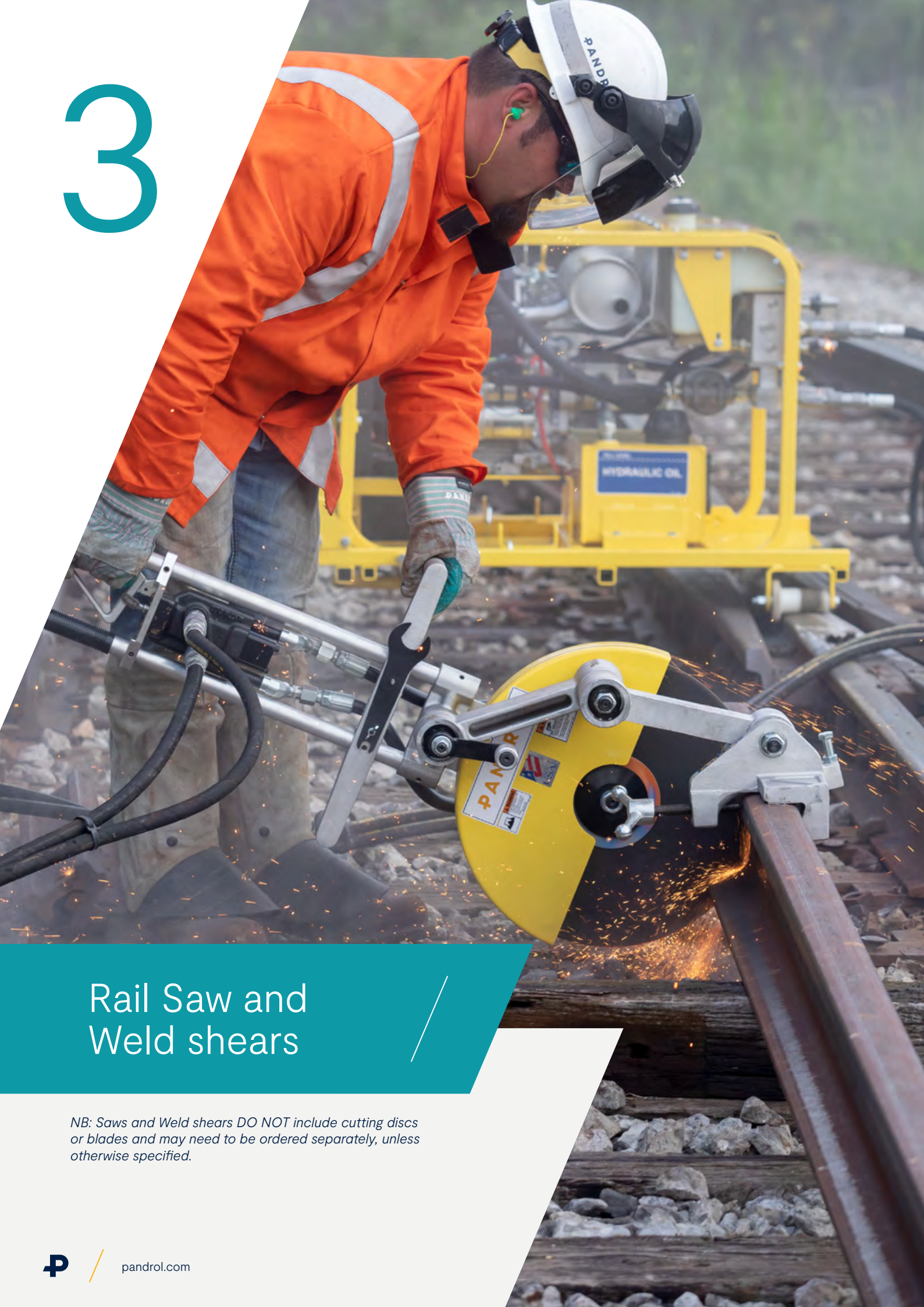
ACCESSORIES:

- **09298 - 8" x 2" x 1" Stone**
- **09281 - HWR Depth Gauge**

Technical data	
Flow	10 gpm (38 lpm)
Pressure	2000 psi (140 bar)
RPM	4000
Dimensions	A: 16" (40.6 cm) / B: 23" (58.4 cm) / C: 32" (81.3 cm)
Weight	68 lbs (30.8 kg)



3



Rail Saw and Weld shears

NB: Saws and Weld shears DO NOT include cutting discs or blades and may need to be ordered separately, unless otherwise specified.



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03900A – REVERSING RAIL SAW

The 03900A Reversing Rail Saw is a hydraulic powered abrasive rail saw that can cut rail from either side of the rail safely without disconnecting or realignment; simply pivoting the saw to the other side of the rail provides the flexibility and safety that is needed on track.

ACCESSORIES:

- **00897 – 14" Saw Blades**
- **00899 – 16" Saw Blades**

Technical data	
Flow	10 gpm (38 lpm)
Pressure	2000 psi (140 bar)
RPM	3200
Dimensions	A: 36" (91.4cm) / B: 10" (25.4cm) / C: 17" (43.2cm) CLAMP: 36" x 8" x 11"
Weight	40 lbs (18.1 kg) CLAMP: 21 lbs (9.5 kg)



05100A – WELD SHEAR

The 05100A Weld Shear is lightweight and highly efficient. Spring centered flow control valve permits safe and precise shearing of a thermite weld. The shield totally protects fittings and hoses and the adjustable hold downs are self locking and will assure a safe, clean cut.

ACCESSORIES:

- **00980 – 132lb/136lb Shear Blades**
- **00965 – 115lb Shear Blades**
- **HRT100 – Head Riser Removal Tool**

Technical data	
Flow	5 gpm (19 lpm)
Pressure	2000 psi (140 bar)
Dimensions	A: 27" (68.6cm) / B: 20" (50.8cm) / C: 13" (33cm)
Weight	111 lbs (50.3 kg)



05100HY - WELD SHEAR

The 05100HY Weld Shear is lightweight and highly efficient. Spring centered flow control valve permits safe and precise shearing of a thermite weld. The shield totally protects fittings and hoses and the adjustable hold-downs are self locking and will assure a safe, clean cut.

ACCESSORIES:

- 00980 - 132lbs/136lbs Shear Blades
- 00965 - 115lbs Shear Blades
- HRT100 - Head Riser Removal Tool

Technical data	
Flow	5 gpm (19 lpm) or 10 gpm (38 lpm)
Pressure	2000 psi (140 bar)
Dimensions	A: 27" (68.6cm) / B: 20" (50.8cm) / C: 13" (33cm)
Weight	85 lbs (38.6 kg)



05000 - HAND PUMP WELD SHEAR

The 05000 Hand Pump Weld Shear is a self contained Hydraulic Weld Shear. The adjustable hold downs are self locking and will assure a clean safe cut. The average cycle time is 30-45 seconds to shear a weld. The hand pump model can be converted to operate with the Pandrol Power Unit with very minor modifications.

ACCESSORIES:

- 00980 - 132lbs/136lbs Shear Blades
- 00965 - 115lbs Shear Blades
- HRT100 - Head Riser Removal Tool

Technical data	
Pressure	3000 psi (206 bar)
Dimensions	A: 29" (73.7cm) / B: 20" (50.8cm) / C: 13" (33cm)
Weight	130 lbs (59 kg)



05100-ECO / 05100-ECO G – Battery Operated Weld Shear

Pandrol's Light-Weight Battery-Operated Weld Shear provides a solution to zero emission sheering, delivering consistently fast and excellent results.

Designed to operate with the included battery-operated non-impacting drill Milwaukee, the simple chuck attachment allows easy installation of the shear so it is quickly operational on the track. The hydraulic system provides adequate shearing force for welds in various types of rail.

ACCESSORIES:

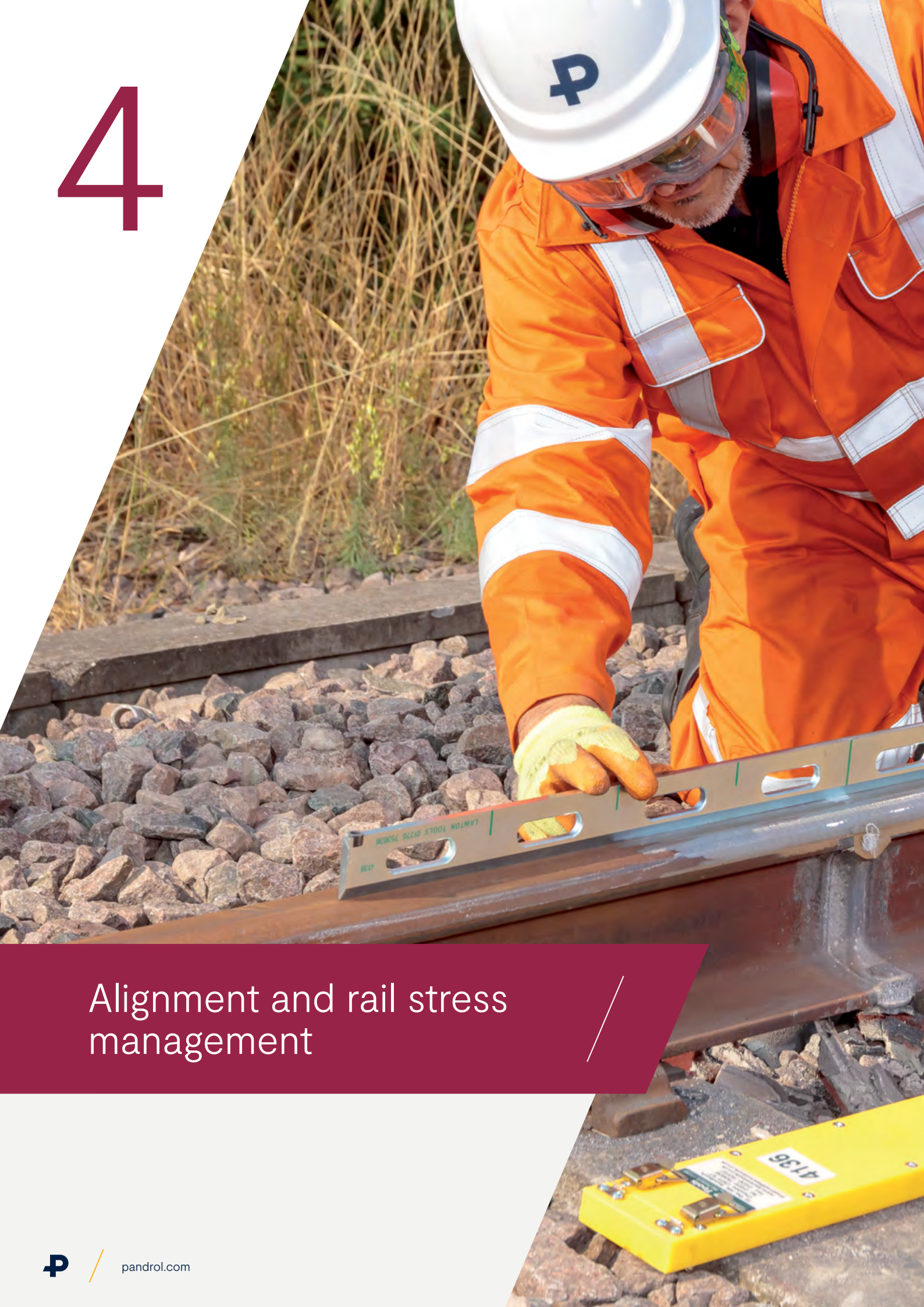
- **00963 – 132lbs/136lbs ECO Shear Blades**
- **00964 – 115lbs ECO Shear Blades**
- **HRT100 – Head Riser Removal Tool**

Technical data	
Pressure	2000 psi (140 bar)
Dimensions	Length: 31.25" (79.4cm) / Width: 20.45" (51.9cm) Height: 15.7" (39.9 cm)
Weight	98 lbs (45.3kg)

05100-ECO G : 05100-ECO with guard



4



Alignment and rail stress management

A Frame Rail Aligner

11111002 – CR61 Universal

11111003 – CR57 Grooved rail

11111004 – CR57 Crane rail

11111006 – CR57 Fastclip®

The A Frame rail aligner delivers precision positioning of the rails prior to aluminothermic welding. Pandrol's A Frame range is designed for easy lifting, carrying, and operation. The aligner jaws can be modified to a wide range of global rail types.

ADVANTAGES:

- Suitable for all kinds of rail
- Heavy duty construction
- Lightweight alloy
- Ensures accurate alignment
- Guarantees the welding geometry

Technical data				
Description	CR61 Universal	CR57 Grooved rail	CR57 Crane rail	CR57 Fastclip®
Rail type	Vignol rails	Grooved and Tramway rails	Crane rails	Vignol rails
Spread (distance between feet)	570mm			
Dimensions	Width: 6.3" (160mm) / Height: 23.6" (600mm)			
Weight	39.6 lbs (18 kg)			



Alignment / Straight Edge

Our straight edges enable the welder to properly crown the rail ends to the desired height with ease. Flat or adjustable straight edges are essential tools, used before casting aluminothermic welds.

ADVANTAGES:

Straight edges

- Laser-engraved graduation
- Traited steel
- Ergonomic handle

Magnetic straight edge

- Lightweight
- Maximum stability
- Adjustable height knobs



Technical data					
Description	1,0 m magnetic straight edge with adjustable stands calibrated – RAP1000	1,0 m steel straight edge, calibrated – RP1000	1.0 m bevelled edge 1,0 m, large handle, calibrated – Bevelled-Edge 1000	0,5 m bevelled straight edge, calibrated – RB500	0,7 m bevelled straight edge, calibrated – RB700
Item number	19123022	19123024	19123014	19123021	19123023
Protective case	Included	Included	Included	Included	Included
Length	39.3" (1.00m)	39.3" (1.00m)	39.3" (1.00m)	19.7" (0.50m)	27.6" (0.70m)
Protective case	PEHD case (42005001)	Soft case (29123012)	–	–	–

VERSE

VERSE® is an internationally accredited scientific instrument that is used to non-destructively measure the stress-free temperature of continuously welded rail, improving safety and reliability through the avoidance of derailment caused by track buckles or breaks.

ADVANTAGES:

- Providing non-destructive and accurate measurements for stress-free temperature (SFT), VERSE® is the recognised industry standard for measuring SFT.
- Measurements using VERSE® allows destress activities to be targeted to areas of non-compliance, reducing total cost of maintenance.
- VERSE® can be used to certify new or existing track.
- Easy and efficient to use, VERSE is a digital system providing an instant result, full traceability, and integration to asset management databases.

COMPATIBILITY:

- Compatible with all vignola rail sections and most track forms.



VSR (Stressing Rollers)

The Vortok Stressing Roller (VSR) is a fast fit and fast removal roller system designed to reduce friction during stressing operations. It offers a very safe alternative to traditional methods, as well as achieving significant quality, cost, and time savings.

ADVANTAGES:

- Reliability and safety increase for rail network through; a more even Stress-Free Temperature distribution, few welds being required, and lower residual tension applied to welds (reducing rail breaks).
- Efficiency gains by managing friction between sleepers and rail. This allows lower tensor load, longer stressing lengths, reduced time on track, and improved Stress-Free Temperature distribution.
- Safe method of lifting rail keeping workers hands clear of the rail. The VSR replaces rail jacks, under rollers and side rollers.

COMPABILITY:

- Pandrol eClip
- Pandrol fc Fastclip
- Pandrol fe Fastclip
- Pandrol fcx Fastclip
- Pandrol Safelock



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by **PANDROL**

**Track welding has been waiting
for a breakthrough. i+weld delivers.**

We understand the complexity of rail welding.
We've developed a solution that addresses customers'
challenges head-on. Complete more welds in less time
with semi-automated processes that reduce the physical
strain on welders and streamline training.

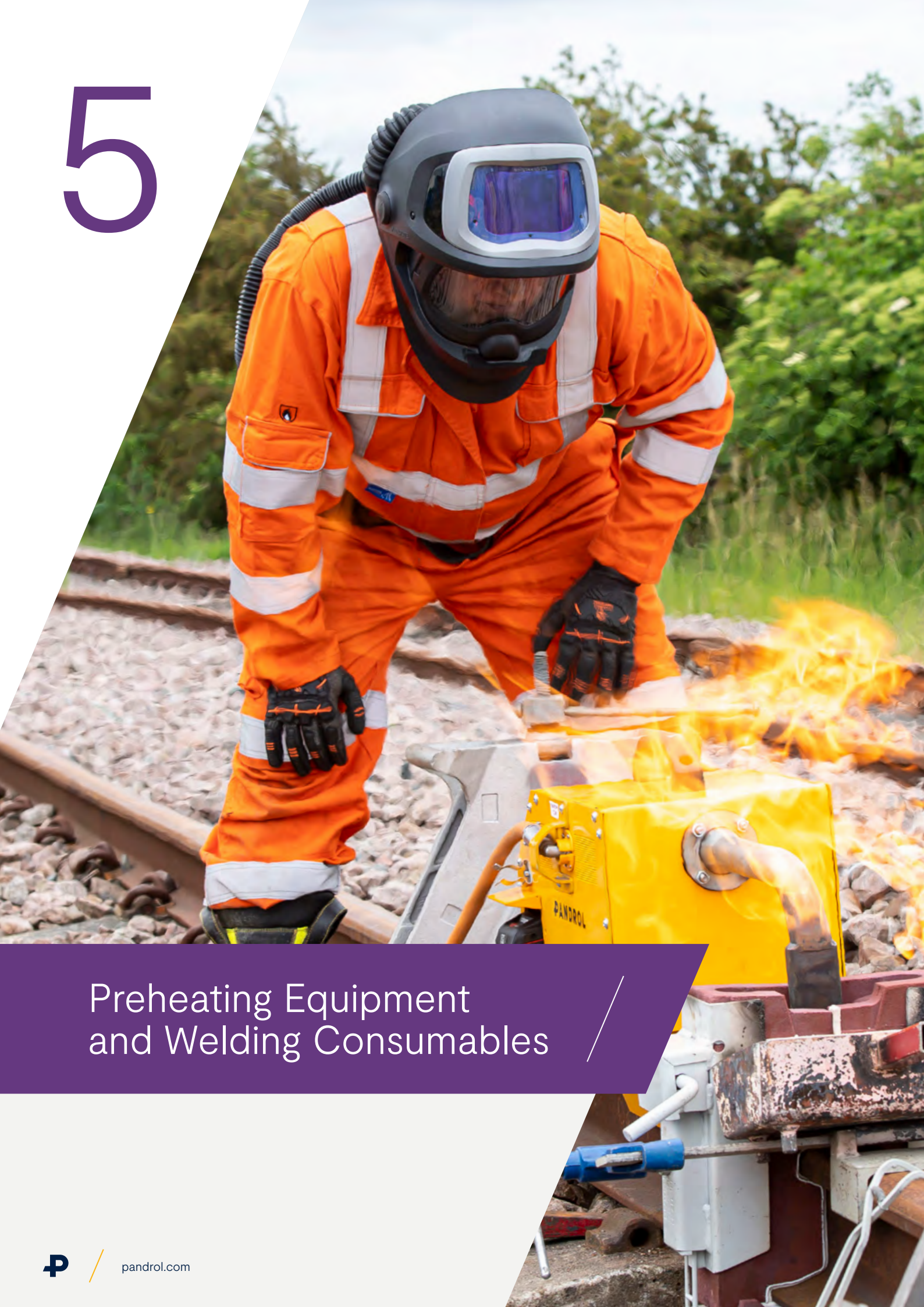
Yesterday. Today. Tomorrow.



More info.



5



Preheating Equipment and Welding Consumables



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Battery High Flow Preheater S000B505 – HFP 36V Milwaukee batteries

The High Flow Preheater has been designed as a universal preheating system, able to replace all current preheating equipment. It brings the best compromise between all technologies and has been automated for easier and more reliable operations.

ADVANTAGES:

- **Lightweight and compact design**
- **Reduces weld-defect rate**
- **Generates significant cost savings**
- **Automation & Pre-set timing**

Technical data	
Battery	2 x 18 Volts
Dimensions	750mm / 305mm / 295mm
Weight	41.9 lbs (19 kg)



03800B – Hydraulic PREHEATER

The Hydraulic Preheater is a compact, light weight and easy-to-use tool for heating the rail-ends before welding. It features a hydraulically driven blower and uses bottled Liquid Propane (LP). The Pandrol Hydraulic Preheater utilizes Oxygen pulled in from the air, eliminating the need for bottled Oxygen. This Hydraulic Preheater ensures the rail-ends never melt during preheating with the QP Process and the torch safely extinguishes once removed from the molds. The Pandrol Hydraulic Preheater is designed to be safe and economical to use for any welding crew.

ADVANTAGES:

- **Preheater Complete Setup: 03800B-COMP**
(includes all items listed below)
- **Hydraulic Preheater Unit: 22500000**
- **Precision Torch Stand: 26110000**
- **Hydraulic Torch: 22600001**
- **50" Air-Propane Hose: 22700000**
- **20" Flex Hose: 22800000**
- **Flint Ignitor Pistol: HP-FIP-1**

Technical data	
Flow	10 gpm (38 lpm)
Pressure	2000 psi (140 bar) / 3600 RPM
Dimensions	18" (45.7 cm) / 16" (40.6 cm) / 131/2" (34.3 cm)
Weight	83 lbs (37.6 kg)



Hydraulic Torch setup (*no guard*)



Hydraulic Torch manifold
with air gage & guard

PRECISION TORCH STAND

The Precision Torch Stand is used during the preheating process to finely tune the torch position while preheating the rail ends. The 2 adjustment knobs on the upper portion of the Torch Stand manipulate side-to-side and forward/backward movement while the smaller adjustment rings on the lower portion, the stem, allow the user to raise and lower the height of the torch when needed and lock it into place for the appropriate height. The ability to make fine adjustments on the Precision Torch Stand gives the welder the advantage to create an even and plumb preheat. With proper use, the Pandrol Precision Torch Stand will reduce costly errors during the preheating process, reducing the probability of weld failure due to an improper preheat.



Ignition System: Starwel®

Startwel®

The Startwel® Ignition System allows the welder to easily ignite the weld charge to initiate the pour process of the Pandrol aluminothermic weld, replacing the traditional “sparkler” igniter design.

ADVANTAGES:

- **Non-hazardous classification for transport**
- **Consistent ignition point**
- **Long-lasting lithium-ion battery**

STARTWEL® IGNITION KIT: **82632508**

Included in the kit	
82632506	1 empty Startwel® Suitcase
82632509	1 Starter Handle
82632504	1 14.4V battery
82632505	1 Battery Charger
82632502	1 Box of 100 Starters



LP (Tee rail application)

LP (Long Preheat) process to meet the rigorous demands of railway networks across Canada.

Designed specifically for the Canadian climate and operational environment, the LP process combines robust preheating with high-quality mould technology to deliver durable, consistent rail welds, even in extreme weather conditions.

LP process is widely adopted by Class I railways, urban transit authorities, and contractors across the country. The process ensures a strong metallurgical bond, excellent track geometry retention and compatibility with standard North American rail profiles.



QP (Tee rail application)

QP (Quick Preheat) technology is addressing the evolving needs of the North American rail industry. Introduced to improve consistency, speed, and weld quality, the QP process quickly gained recognition among major railroads for its reliable performance in demanding track conditions.

By combining traditional exothermic welding principles with modern mould technology and optimized workflows, QP set a new standard for field welding – reducing preheat time, improving metallurgical integrity, and increasing operational efficiency.

Since its introduction, Boutet QP has been deployed across Class I networks, transit systems, and industrial lines, offering a trusted solution where durability and uptime are critical.



Vignole, grooved and crane rail welding : AP

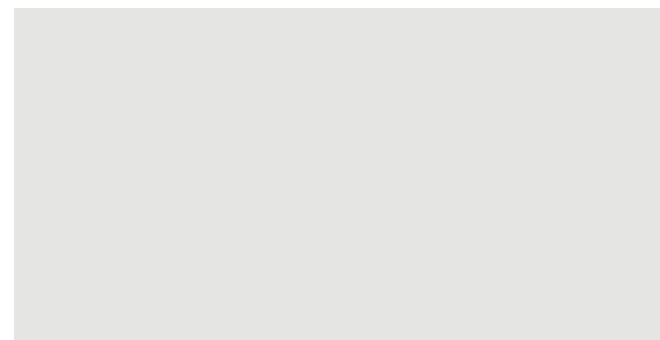
AP (Tee, Grooved and crane rail application)

AP (Avec préchauffage – With preheating) process is a high-efficiency solution tailored for demanding tee, grooved and crane rail applications.

Developed in Canada to meet the needs of urban transit systems, ports, and heavy industrial environments..

Engineered to accommodate the unique geometries of grooved and specialty rails, the AP process ensures a strong metallurgical bond, minimal deformation, and excellent surface finish essential for embedded track systems, crane projects, complex urban or industrial work zones.

Widely used across light rail networks, steel plants, and intermodal facilities, the AP process is supported by a field-proven procedures to meet the toughest welding challenges.



Head Wash Repair Rail Welding

HWR

Pandrol is a world leader in Head Wash Repair welding, which is a cost-effective and efficient solution to repairing railhead defects and significantly decreasing the maintenance cost of modern rail networks. It can also be used to repair flash butt welds, which often suffer from squats.

ADVANTAGES:

- **Very efficient compared to using a new piece of rail**
- **Reducing the number of welds from two to one**
- **Available for grades R260, R350 HT and R350 LHT**



Self-sealing mould: i+seal

i+seal

The i+seal removes the need to do this while providing leak and moisture-free results. The built-in strip expands during the pre-heating phase to create a tight weld seal between the mould and rail.

ADVANTAGES:

- Save three to five minutes per weld, as the mould is sealed automatically and there is no need for the luting procedure
- Self-sealing felt more reliable than manual sealing, especially in cold weather and tight spaces
- Reduce the defect rate by facilitating moisture evacuation during the preheat
- Promote welder's health and wellbeing, reducing stress and time spent kneeling
- Compatible with vignole and grooved rails

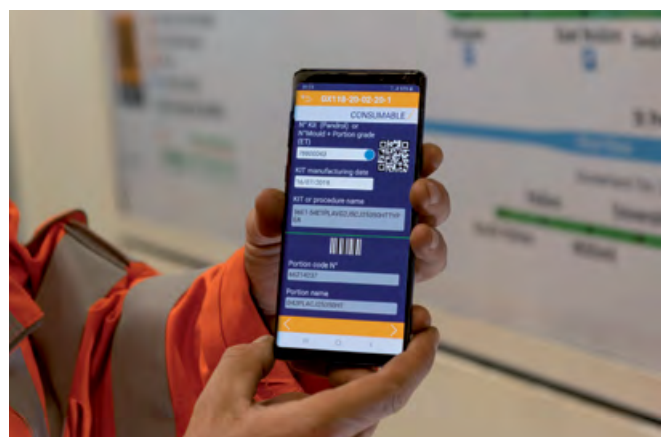


Pandrol Connect

Pandrol Connect is a mobile app designed to support aluminothermic welders through the weld process, capture live data about the weld, save time and improve the traceability of welds for contractors and rail network operators. Access weld information on site even without internet access.

ADVANTAGES:

- Full traceability of welding
- Saves time for all users and drastically cuts down paperwork
- QR Code integration
- Welding instructions included
- Available now for Android and IOS devices



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Drill and Impact wrenches



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03500 – SELF-FEED RAIL DRILL

The 03500 Self Feed Rail Drill is a lightweight maintenance tool that offers cost effective operation. Maintenance crews will appreciate the simple clamp for quick setup on track. The use of Arrowhead inserts (patented), allows for quick drilling time and precision holes. The drill includes a lubrication system.

ACCESSORIES:

- **03532 – Rail templates (Specify Rail Profile)**
- **01540 – Index bars (Specify Rail Profile)**
- **03598 – Storage Case**
- **03599 – Biodegradable cutting fluid (1 or 5 US Gallon)**
- **Assortment Of Carbide Drill Bit Inserts**

Technical data	
Flow	10 gpm (38 lpm)
Pressure	2000 psi (140 bar)
Dimensions	A: 35" (89cm) / B: 9" (22.8cm) / C: 15½" (39.4cm)
Weight	68 lbs (31 kg)



SELF-FEED RAIL DRILL BIT OPTIONS /

Part no. designates which diameter inserts are available for that particular holder.

Technical data			
Insert diameters: Imperial	7/8"	1-1/16"	1-7/16"
	15/16"	1 1/8"	1 1/2"
	1"	1-3/16"	1 5/8"
		1 1/4"	
Insert diameters: Metric		1-5/16"	
		1 3/8"	
	22mm	26mm	36mm
	23mm	27mm	37mm
	24mm	28mm	38mm
	25mm	29mm	
		30mm	
		31mm	
		32mm	
		33mm	
		34mm	
		35mm	
Item number	03570-1	03571-1	03572-1



Other special order bit sizes are available upon request

SELF-FEED RAIL DRILL: RAIL TEMPLATES AND INDEXING BAR OPTIONS /

Rail Templates	
Description	Item number
112-115-119 / 131-132-136 03532-15 100 A.R.A.-A.	03532-1
100 AREA - U.P. / 105 DUDLEY 03532-16 22 KG/M	03532-3
133 AREA / 140 AREA 03532-17 30 KG/M	03532-4
127 DUDLEY / 130 PS 03532-18 48 KG/M	03532-5
90 A.R.A.-B 03532-19 57 KG/M	03532-6
90 A.R.A.-A 03532-20 152 PS	03532-7
110 AREA / 110 AREA - U.P.	03532-8
112-115-119 / 141 AB	03532-9
100 AREA (2-45/64" to centerline of hole)	03532-10
131-132-136 RE / 133 RE	03532-11
100 A.R.A.-B	03532-12
85 A.S.C.E	03532-13
100 A.R.A.-A.	03532-15
22 KG/M	03532-16
30 KG/M	03532-17
48 KG/M	03532-18
57 KG/M	03532-19
152 PS	03532-20

Indexing Bars	
Description	Item number
2-1/16 x 5-1/2	01540-1
2-1/2 x 6-1/2	01540-2
3-1/2 x 6 x 6	01540-3
2-13/32 x 5 x 5	01540-4
2-3/4 x 5-5/8 x 5-5/8	01540-5
2-1/32 x 5 x 5	01540-6
2-23/32 x 6 x 7	01540-7
2 x 7	01540-8
2-3/16 x 4-1/2	01540-9
2-5/8 x 5-1/2	01540-10
2-5/16 x 6-1/2 x 6-1/2	01540-11
2-1/2 x 6	01540-12
3 x 6-1/2 x 6-1/2	01540-13
2-1/2 x 5-1/2	01540-14
2-1/2 x 5	01540-15
2 x 4-1/2	01540-16
2-3/4 x 5-3/64 x 5-3/64	01540-17
2-7/16 x 6-1/2	01540-18

Double-sided
Template

Indexing Bar



02500 – 10 gpm 1" IMPACT WRENCH

The 02500 1" Impact wrench is capable of handling the toughest jobs. Crossing, frog or track bolts are no problem for this rugged tool. Anti-vibration design and optional handle provide an efficient, safe and ergonomic work position for the task at hand. A torque adjustment knob will fine-tune torque from 0-3500 ft/lb. Designed for 5 gpm or 10 gpm.

ACCESSORIES:

- **02575 – Stand Up Handle**
- **Sockets Available – Specify Requirements**

Technical data	
Flow	5 gpm (19 lpm) or 10 gpm (38 lpm)
Pressure	2000 psi (140 bar)
Dimensions	A: 18" (45.7cm) / B: 8" (20.3cm) / C: 10" (25.4cm)
Weight	37 lbs (16.8 kg)



04500D – ½" Hydraulic DRILL / IMPACT WRENCH

The 04500D ½" Impact wrench is designed to offer the operator superior torque handling capabilities under the most adverse conditions. Operators will appreciate the lightweight aluminum body and the ergonomic trigger design. The impact is shipped with a ¾" quick change chuck for a wide variety of bits and accessories. A ½" square drive is included for the use of ½" impact sockets.

ACCESSORIES:

- **01743 – Counter Bore 1½"**
- **01750 – Counter Bore 2-¾"**
- **01751 – Counter Bore 3"**
- **01775 – ½" x 12" Auger Bit**
- **01782 – ¾" x 18" Auger Bit**
- **01777 – 1½" x 12" Auger Bit**
- **01781 – 1½" x 18" Auger Bit**
- **01795 – 5/8" x 18" Auger Bit**
- **045046 – Adapter ½" Square Drive**

Technical data	
Flow	5 gpm (19 lpm)
Pressure	2000 psi (140 bar)
Dimensions	A: 10" (25.4cm) / B: 7" (17.8cm) / C: 7" (17.8cm)
Weight	13 lbs (6 kg)



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Miscellaneous



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01100RM - LIGHTWEIGHT TWO-STAGE SPIKE Puller

The 01100RM Spike Puller is twenty five percent (25%) lighter than our standard version. Weighing only 39 pounds, it generates the same pulling force of 13,000 pounds in a lighter design.

A safe, internal two-speed design ensures operators grasp the spike with a slower speed, avoiding a jerking motion—common with most spike pullers. The safety trigger provides a positive lock that prevents accidental activation of the tool. Its efficient design enables the operator to grab the spike from either side of the rail without repositioning, yet allowing the operator to pull and automatically drop the spike at the top of the stroke in one motion. All moving parts are fully enclosed for safety and the jaws can be changed without special tools within minutes at the work site.

ACCESSORIES:

- **01145 - Hair Pin Puller Kit**

Technical data	
Flow	5 gpm (19 lpm) or 10 gpm (38 lpm)
Pressure	2000 psi (140 bar)
Dimensions	A: 30" (76.2cm) / B: 13" (33cm) / C: 4" (10.1cm)
Weight	39 lbs (17.7 kg)



08200 - TAMPER

The 08200 Hydraulic Tamper is equipped with torsion dampened handles which reduce the vibration level to a minimum. An excellent multi-purpose tool that can tamp, cut asphalt or break concrete.

ACCESSORIES:

- **01362 - Tamper Bit**
- **01365 - Spiker Bit**
- **01370 - Asphalt Cutter Bit**
- **01375 - Concrete Breaker**

Technical data	
Flow	5 gpm (19 lpm)
Pressure	2000 psi (140 bar)
Dimensions	A: 18" (45.7cm) / B: 5" (12.7cm) / C: 30" (76.2cm)
Weight	62 lbs (with bit) (28.1 kg)



SAFETY BARRIER

The Pandrol Safety Barrier is designed for worker protection and is widely used in many countries including the UK, Germany, Australia, Belgium, Sweden and Norway. The barrier provides an effective safe zone for track workers (Green zone in the UK) and fits virtually all rail types internationally.

ADVANTAGES:

- **Cost savings**
- **Improved track safety**
- **Quick & easy to install**
- **All components are fully re-usable**



SONICVIZIO-WS-S (i+DETECT)

SonicVizio-WS-S offers maximum versatility for various ultrasonic inspection works on track. With its lightweight and retractable design, operator can easily transport the equipment to inspect welds, switches & crossings, defects to confirm.

A probe equipped with cutting-edge ultrasonic technology can be offset to provide accurate inspection on any type of vignole or groove rail, as well as adapt to any worn rail profile.

Its innovative SonicView Software designed by track inspection experts provides ergonomic cutting edge features including automatic detection and listing of defects, all located through GNSS and track localization unit thus ensuring inspections assessment from office.

ADVANTAGES:

- **Quickly inspect the rail condition**
- **Weights only 3 kg**
- **Possibility to use even in traffic**
- **Possibility to adapt all probes**
- **Ideal tool for inspecting after head wash repair**
- **Inspect all track components**



Partners in excellence

Contact your local team to discuss your requirements

pandrol.com/contact

