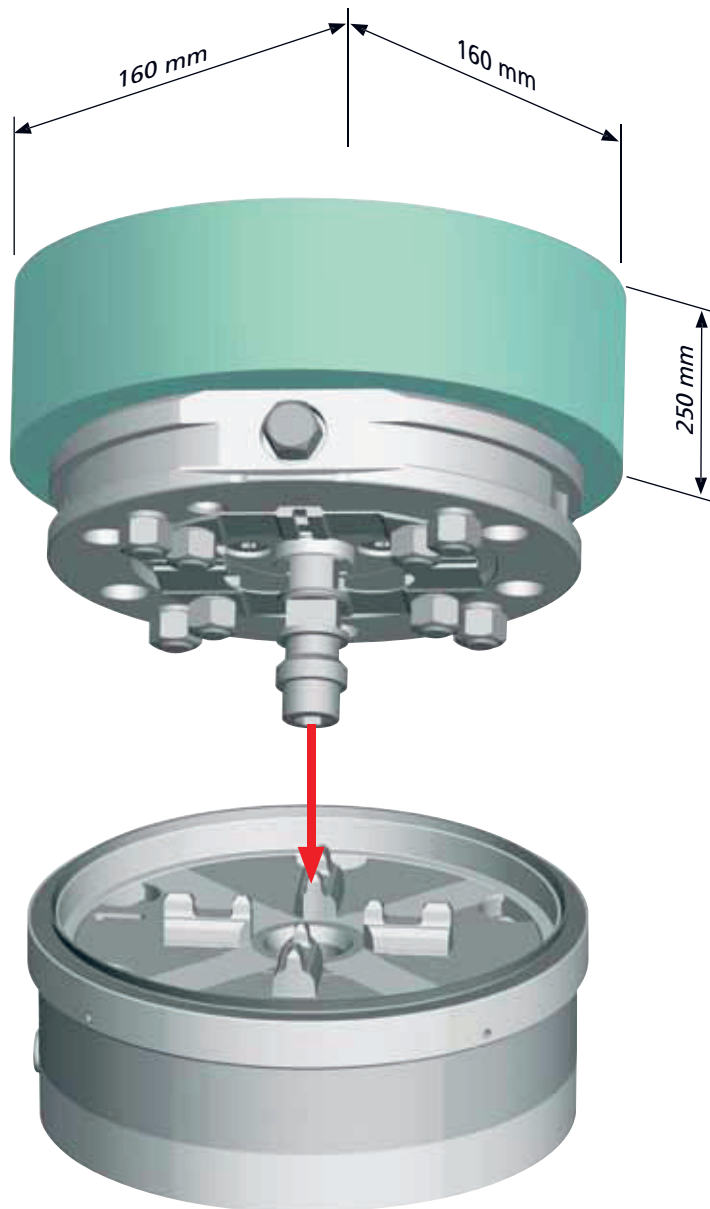


EROWA PowerChuck P

Accessible from all sides

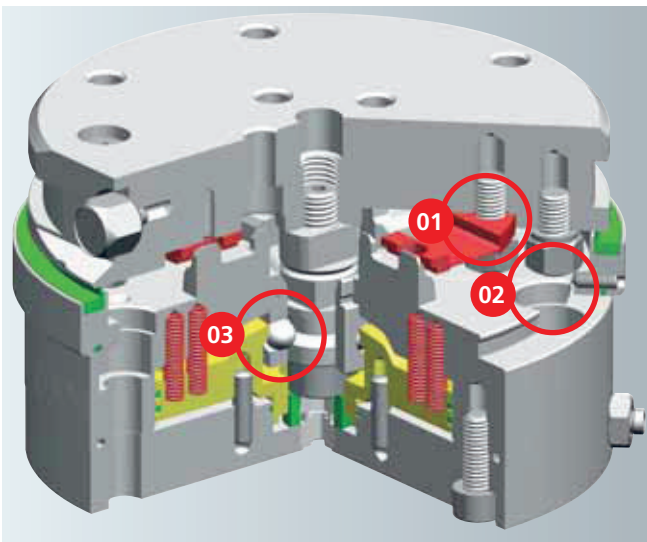
EROWA PowerChucks are quick and easy to integrate on a wide variety of machining centers.



- Whether affixed to the T-slot table or built into the integrated axis, there is always a good solution.
- Access from all five open sides is particularly important with horizontal machining. The low height of the chuck plays a significant role on smaller machines.
- Operation is manual with an air jet, or with one of the pneumatic control units through the permanently screwed-in connections.
- In automatic operation, the presence and proper position of the pallets in the chuck is monitored (EROWA standard). Support surfaces are automatically cleaned.
- The different variants enable the chuck to be optimally fitted to the existing machine base.

Applications**Handling**

Manual / Loading facility / Robot

Function**01 | Centering plates**

The G-centering plates with their ground centering slots and their 0.7-mm-thick spring plate ensure clean and powerful positioning.

02 | Cleaning

During the clamping process, the contact surfaces of the supports are cleaned with compressed air.

03 | Ball lock

The self-locking ball lock generates a clamping power of 10,000 N; full clamping power is even retained in the case of a pressure failure.

Technical data - PowerChuck P

PowerChuck P	
Pallet size	ø 115 mm, ø 148 mm and ITS 50
Chuck dimensions H x ø	H = 51 mm x ø 156 mm
System height (chuck and pallet)	H = 91 mm
Recommended workpiece size	up to 160 x 160 x 250 mm
Repeatability	0.002 mm
Indexing	4 x 90°
Clamping power	10,000 N
Generated by	springs
Release	compressed air, min. 6 bar
Operation	control unit or air jet

EROWA PowerChuck P in action

Powerful, flexible, universally applicable

Manufacturing is virtually inconceivable anymore without PowerChucks. Whether on milling or drilling machines, whether on profile-grinding or surface-grinding machines, whether on spindles of dividing heads or lathes: wherever it is, they fit like a glove.

Downtimes are completely eliminated by integrating a consistent clamping system on all machine tools.

CLEAN

By automatic cleaning of the contact surfaces.



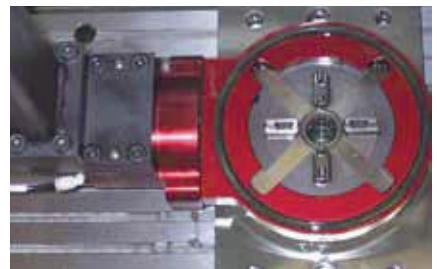
Horizontal chuck on a dividing head.



Flexible and automatic loading of a machine tool with an EROWA handling unit. The ratio of productive hours is considerably increased.



Universal combination of EROWA clamping systems with automatic handling.



Gaskets protect the chucks and ensure secure automatic loading.



Securely clamped also for heavy machining.



We would like to advise you. Please describe your clamping problem to us.



Clamped with μm -accuracy with one movement of the hand.



Practical clamping elements for universal operation.



Grinding or milling: EROWA PowerChucks are just right.



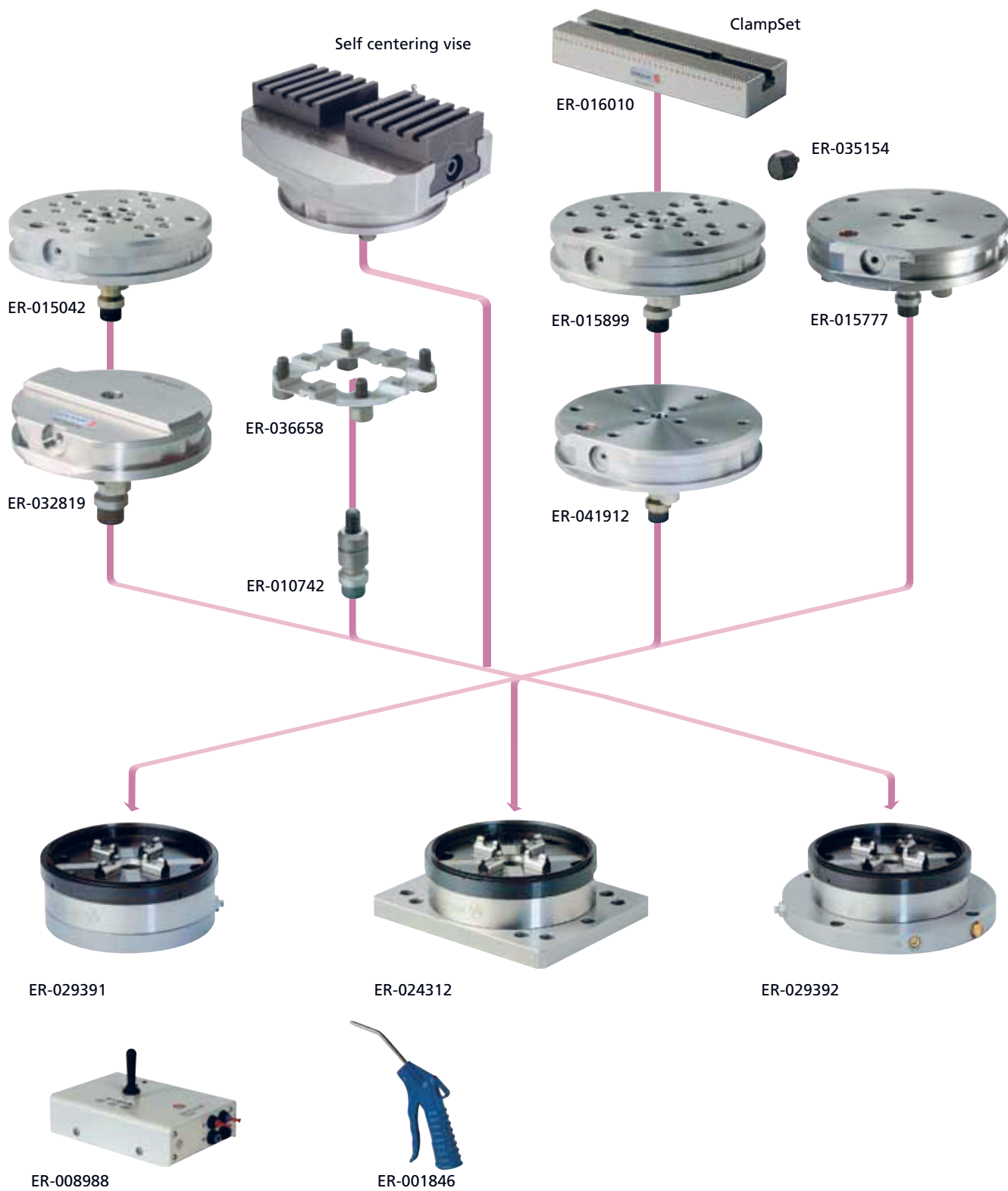
Prepare, clamp and complete the job.



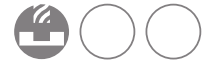
EROWA PowerChuck P

Palletizing system

The components



To make it easier for you to find your way about the fields of application for EROWA products, we use the following symbols in all our documents:



1. Manual operation



2. Operate with compressed air jet



3. Operate with manual valve



4. Operate with manual control unit



5. Operate with electro-pneumatic control unit



6. With central flushing clearance



7. Suited for submerged operation



8. Corrosion-resistant material



9. Suited for automatic operation



10. Handling with EROWA Robot gripper S



11. Handling with EROWA Robot gripper Combi



12. Handling with EROWA Robot gripper C



13. Handling with EROWA Robot gripper 72



14. Handling with EROWA Robot gripper 115



15. Handling with EROWA Robot gripper 148



16. Handling with EROWA Robot gripper RN PC 210



17. Handling with EROWA Robot gripper RCS

EROWA POWERCHUCK P PALLETIZING SYSTEM

PowerChuck P	Chucks	116
PowerChuck P	Workpiece carrier	118
PowerChuck P	Auxiliary Equipment	122



For chip-removing processes



For EDM sinking



For WEDM

ER-029391 PowerChuck P ø 150



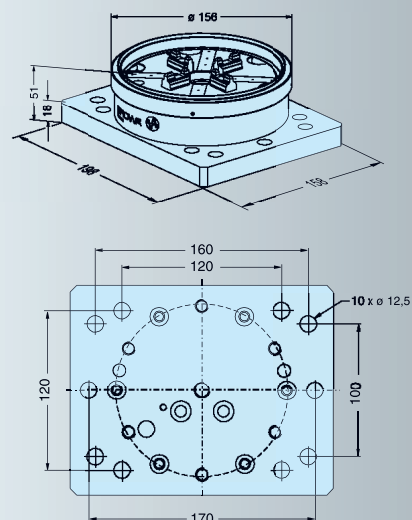
The technical drawing shows two views of the base plate:

- Top View:** A circular plate with an outer diameter of 160 mm. It features six mounting holes arranged in a circle with a diameter of 110 mm. The distance from the center to each hole is 63 mm. Each hole has a diameter of 6 x Ø 10.5.
- Side View:** Shows the plate's profile with an overall height of 51 mm. The bottom flange has an outer diameter of 150 mm and an inner diameter of 156 mm. The brand name "BOSCH" is visible on the side.

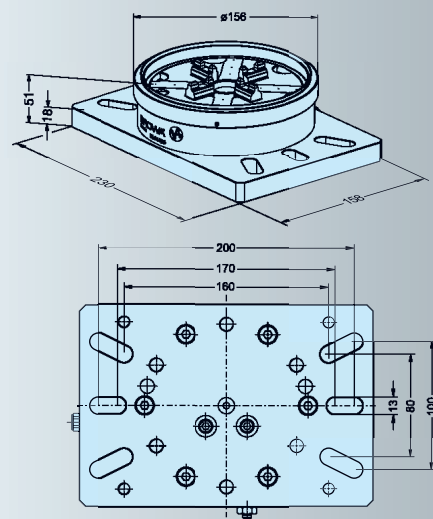
[illegible]

ER-024312 PowerChuck P 158 x 198

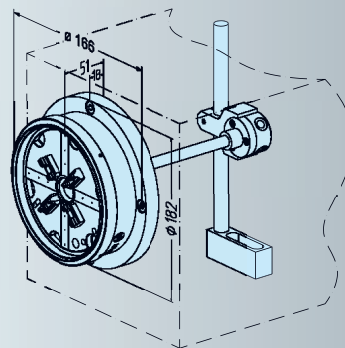
- Version Extra-flat version. Height 51 mm.
Base plate 158 mm x 198 mm.
- Connections On the side or at the rear with two lines.
- Operation With airjet, laterally. With control unit through the two lines on the side and at the rear.

**ER-044310 PowerChuck P 158 x 230**

- Version Extra-flat version. Height 51 mm.
Base plate 158 mm x 230 mm.
- Connections On the side or at the rear with two lines.
- Operation With airgun on the side. With control unit through the two lines on the side or at the rear.
- Information The borehole pattern of this plate fits 40mm and 50mm T-slot distances.

**ER-029422 PowerChuck P / R**

- Version PowerChuck P with rotatable connection, max. 50 rpm.
- Connections Two lines to the rotatable connection.
- Operation With control unit, manually and automatically.
- Application For use on dividing heads and round tables.

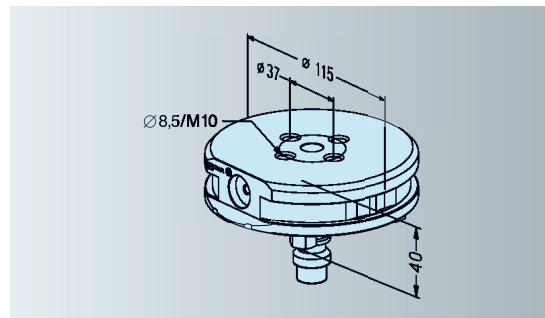


EROWA PowerChuck P

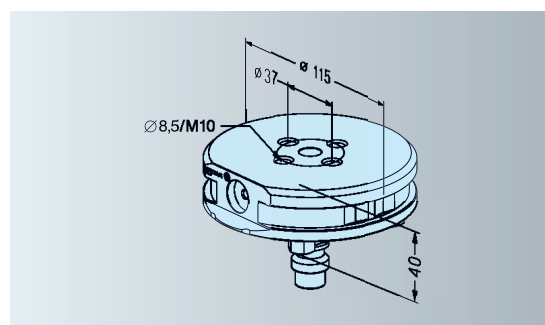
Workpiece carriers

ER-008519 Pallet ø 115 MS EWIS™
ER-032730 Pallet kit ø 115 MS
4 pieces

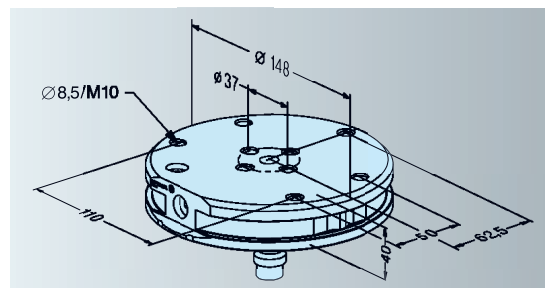

Version Standard type, punched centering plates.
 Application For electrodes and workpieces in EDM.
 Mounting Through pallet with 4xM8 bolts or through blank with 4xM10 bolts.


ER-008517 Pallet G ø 115 EWIS™
ER-032729 Pallet kit G ø 115
4 pieces

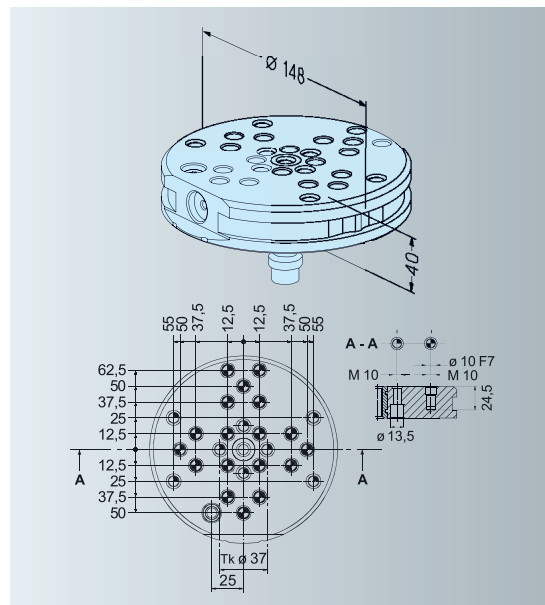

Version Standard type, ground centering plates.
 Application For electrodes and workpieces in EDM.
 Mounting Through pallet with 4xM8 bolts or through blank with 4xM10 bolts.


ER-015776 Pallet ø 148 MS EWIS™
ER-032731 Pallet kit ø 148 MS
4 pieces


Version Standard type, punched centering plates.
 Application For electrodes and workpieces, and for the construction of fixtures.
 Mounting Through pallet with M8 bolts or through blank with M10 bolts.


ER-015042 Pallet ø 148 MS ALU R25
ER-033051 Pallet Kit ø 148 MS ALU R25
4 pieces


Version Body of casted aluminum with borehole pattern 25, ø 10 F7, thread M10.
 Application Palletizing of workpieces and electrodes, mounting of fixtures and ClampSet Base 220.
 Mounting Through pallet with M8 bolts or through blank with M10 bolts.

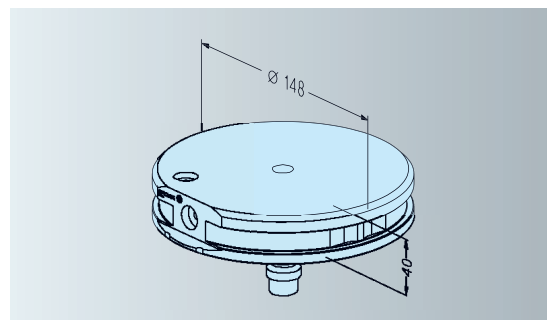


ER-032699 Pallet $\varnothing$ 148 G

**ER-033048 Pallet Kit $\varnothing$ 148 G
4 pieces**



Version Without bore holes apart from center borehole and borehole for reference bolt.
Application For work pieces machined in chip-cutting machining.
Mounting According to your preference.

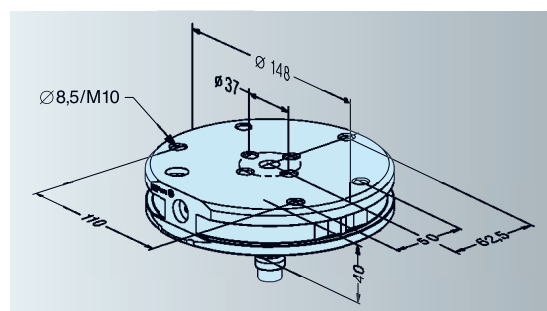


ER-015777 Pallet $\varnothing$ 148 G EWIS™

**ER-032732 Pallet kit G $\varnothing$ 148 EWIS™
4 pieces**



Version Standard type, ground centering plates.
Application To accommodate workpieces and fixtures in chip-cutting machining processes.
Mounting Through pallet with M8 bolts or through blank with M10 bolts.

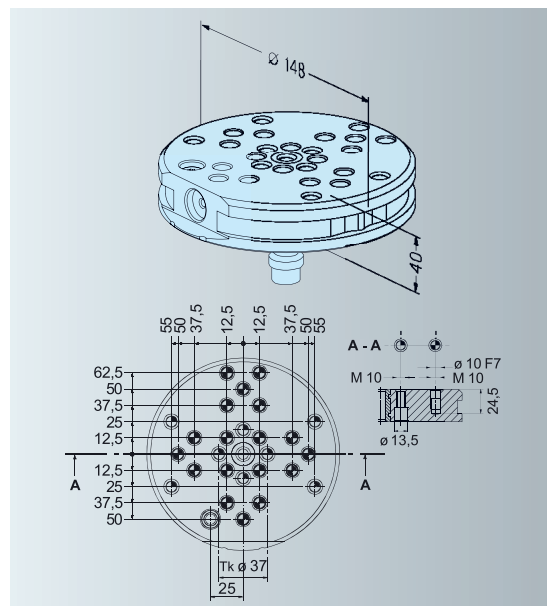


ER-015899 Pallet $\varnothing$ 148 G R25

**ER-033053 Pallet Kit $\varnothing$ 148 G R25
4 pieces**



Version Steel, nitride coated, with borehole pattern 25, $\varnothing$ 10 F7, thread M10.
Application To accommodate EROWA ClampSet Base 220 or specially constructed fixtures and gauges.



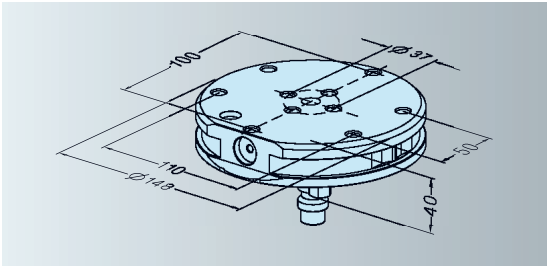
EROWA PowerChuck P

Workpiece carriers

ER-041912	Pallet P ø 148 Inox
ER-041924	Pallet Kit P ø 148 Inox 4 pieces



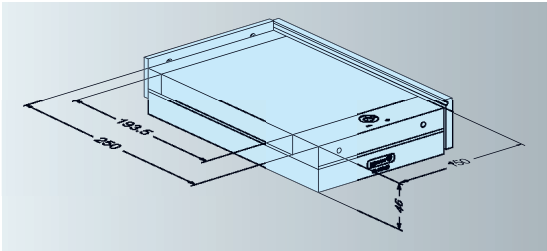
Version	Steel, corrosion-resistant. Centering integrated in the pallet.
Application	For use on all EROWA PowerChucks P and Production-Chuck 210 Combi. To accommodate workpieces and fixtures in chip-cutting machining processes.
Mounting	Through pallet with M8 bolts or through blank with M10 bolts.



ER-038189	Magnetic clamping plate Neospark 250 x 150 x 46
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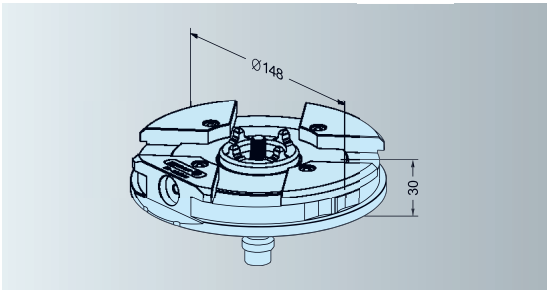
Version	Magnetic clamping plate of steel with M8 attachment boreholes for ITS Pallet ø 148.
Application	To clamp workpieces for surface and profile grinding, WEDM and high-frequency milling.



ER-022250	Adapter pallet ITS 50 / ø 148
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Version	ITS system size 100. Lock with central M 10 locking bolt.
Application	To accommodate ITS Electrode holders system 50. Lock with central M10 locking bolt. For automatic handling.



EROWA PowerChuck P

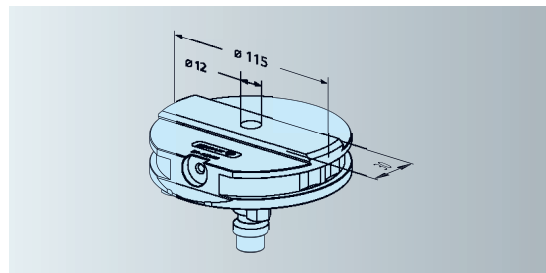
Auxiliary Equipment

ER-032819 Alignment pallet ø 115



Version Pallet ø 115 mm, alignment length 110 mm, center bore-hole ø 12 mm.

Application Alignment of radial, axial and angular position of ITS chucks, PowerChuck P and PC 210 Combi chucks.



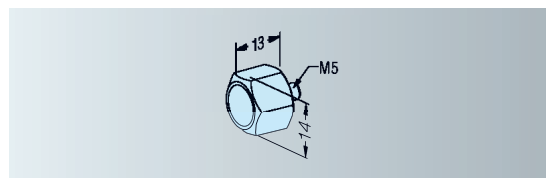
ER-035154 EWIS™ Rapid chip with chip holder SW14 with chip ø 12,4 x 2mm



Version Sleeve fitting with built-in data carrier.

EWIS Rapid chip: read only.

Application In any EROWA electrode holder and pallet which has been prepared for it.

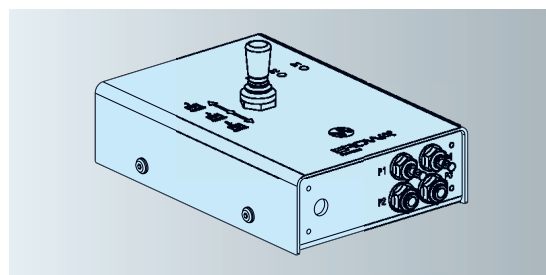


ER-008988 Manual control unit



Version Manual valve to control all the functions of ITS, ITS Compact CombiChuck, PowerChuck P and UPC: opening/reclamping/cleaning.

Application Operation of chucks on machines.



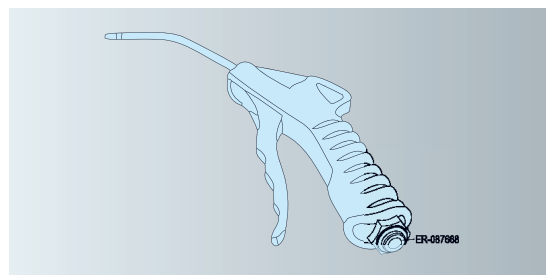
ER-001846 Air jet



Version Plastic, smooth regulation of air flow, connection 1/4", inside thread.

Application Operation of manual chucks.

Option Volume and pressure reduction to air jet (ER-087668). Pressure build up is reduced if Air Jet is not pushed against an air valve.



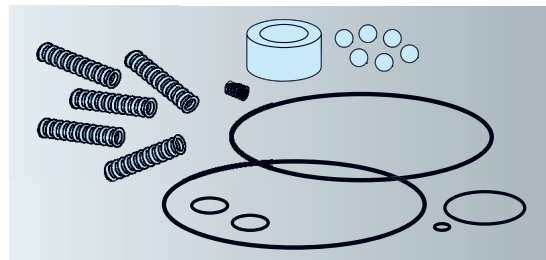
ER-015962 Repair kit PowerChuck P



Version All the wear parts of PowerChuck P.

Application Dismantle chuck according to instructions supplied, replace parts.

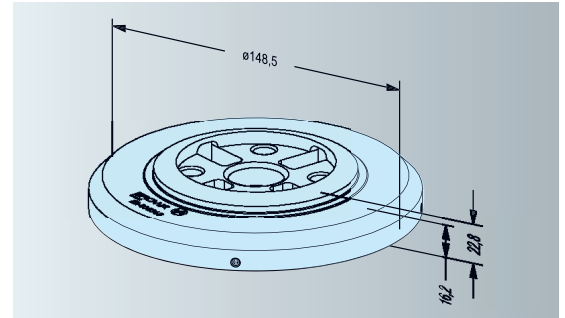
Please note Every chuck is supplied with instructions. Please keep in a safe place.



ER-035365 Sealing ring PowerChuck P ø 72



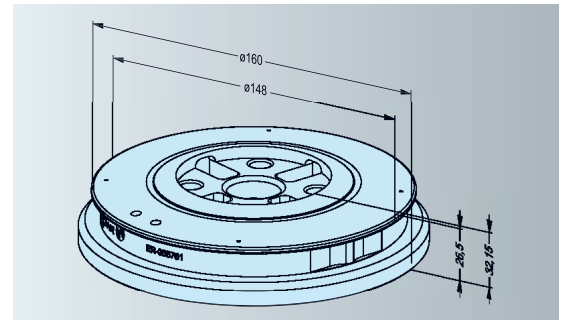
Version Aluminium anodized.
Application Prevents penetration of chips and dirt into the PowerChuck P by application of EROWA Holders ø 72.



ER-055761 Sealing ring for holder 72 PowerChuck P



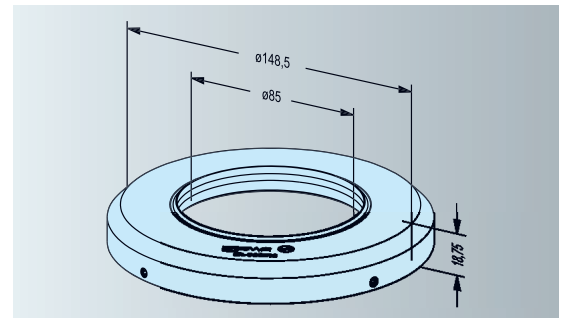
Version Rust-resistant steel
Application Prevents penetration of chips and dirt into the PowerChuck P by application of EROWA Holders 72.



ER-038918 Sealing ring PowerChuck P / ø 85



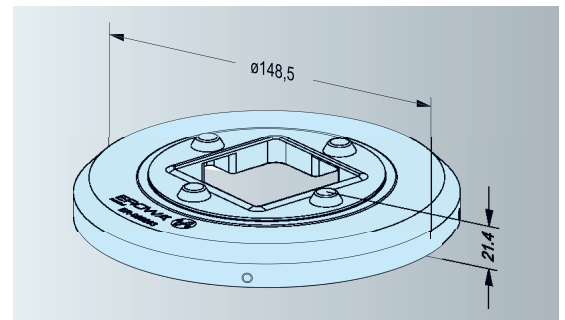
Version Aluminium anodized.
Application Prevents penetration of chips and dirt into the PowerChuck P by application of EROWA pallets PM85.



ER-092203 Sealing ring ITS 50 C for PowerChuck P manual



Version Aluminium anodized.
Application Prevents penetration of chips and dirt into the PowerChuck P by application of EROWA electrode holders C.



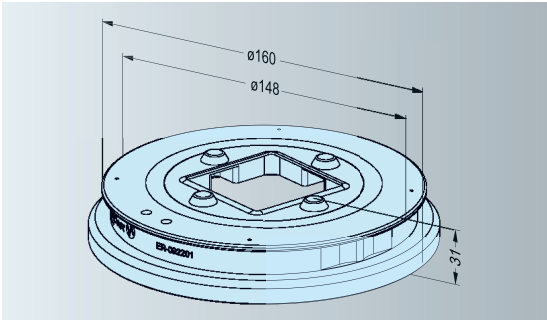
EROWA PowerChuck P

Auxiliary Equipment

ER-092201 Sealing ring ITS 50 C for PowerChuck P automatic



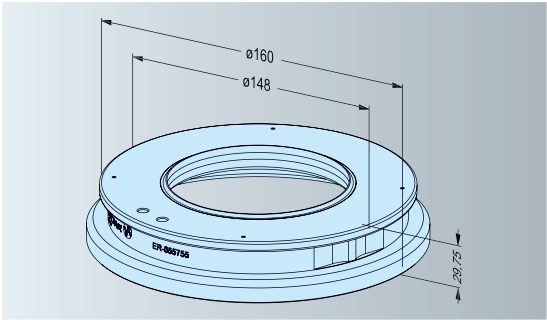
Version Rust-resistant steel
Application Prevents penetration of chips and dirt into the PowerChuck P during machining with EROWA electrode holders C.



ER-055755 Sealing ring for pallet PM85 PowerChuck P



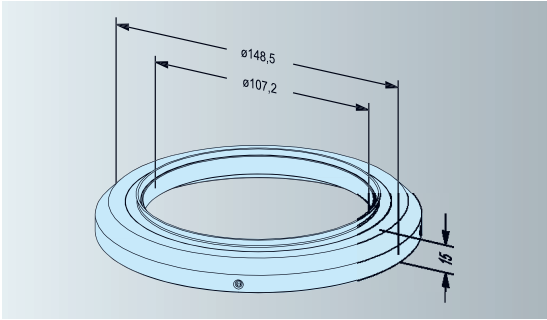
Version Rust-resistant steel.
Application Prevents penetration of chips and dirt into the PowerChuck P by application of EROWA pallets PM85.



ER-016142 Sealing ring holder ø 115



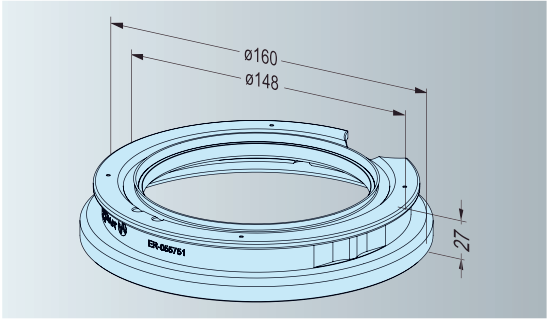
Version Aluminium anodized.
Application Prevents penetration of chips and dirt into the PowerChuck P by application of EROWA ITS pallets ø 115.



ER-055751 Sealing ring for pallet ø115 PowerChuck P

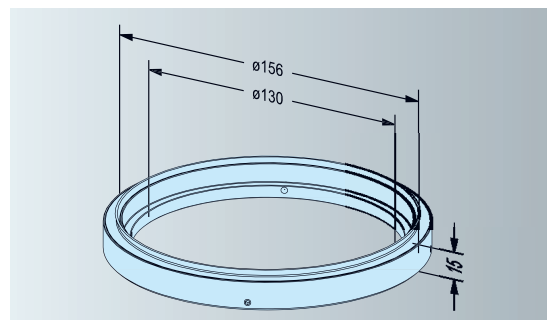


Version Rust-resistant steel.
Application Prevents penetration of chips and dirt into the PowerChuck P by application of EROWA ITS pallets ø 115.

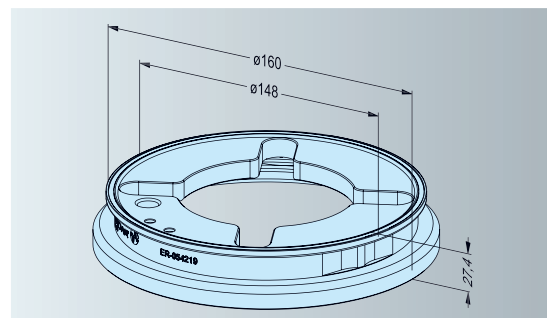


ER-016131 Sealing ring holder ø 148

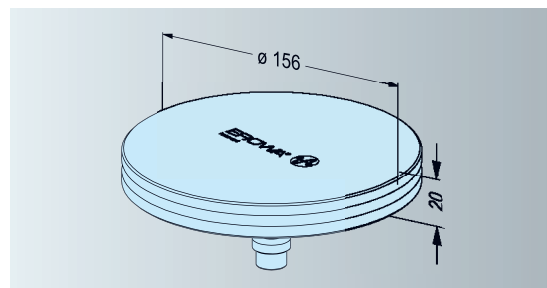
Version Steel black oxide coated.
Application Prevents penetration of chips and dirt into the PowerChuck P by application of EROWA ITS pallets ø 148.

**ER-054219 Sealing ring for pallet ø148 PowerChuck P**

Version Rust-resistant steel.
Application Prevents penetration of chips and dirt into the PowerChuck P by application of EROWA ITS pallets ø 148.

**ER-008972 Cover for PowerChuck P**

Version Aluminum. Without centering plate and supports.
Application Protects the PowerChuck P from chips and cooling water when not in use.

**ER-055763 Cover to PowerChuck P**

Version Rust-resistant steel.
Application Prevents penetration of chips and dirt into the PowerChuck P. For automatic handling.

