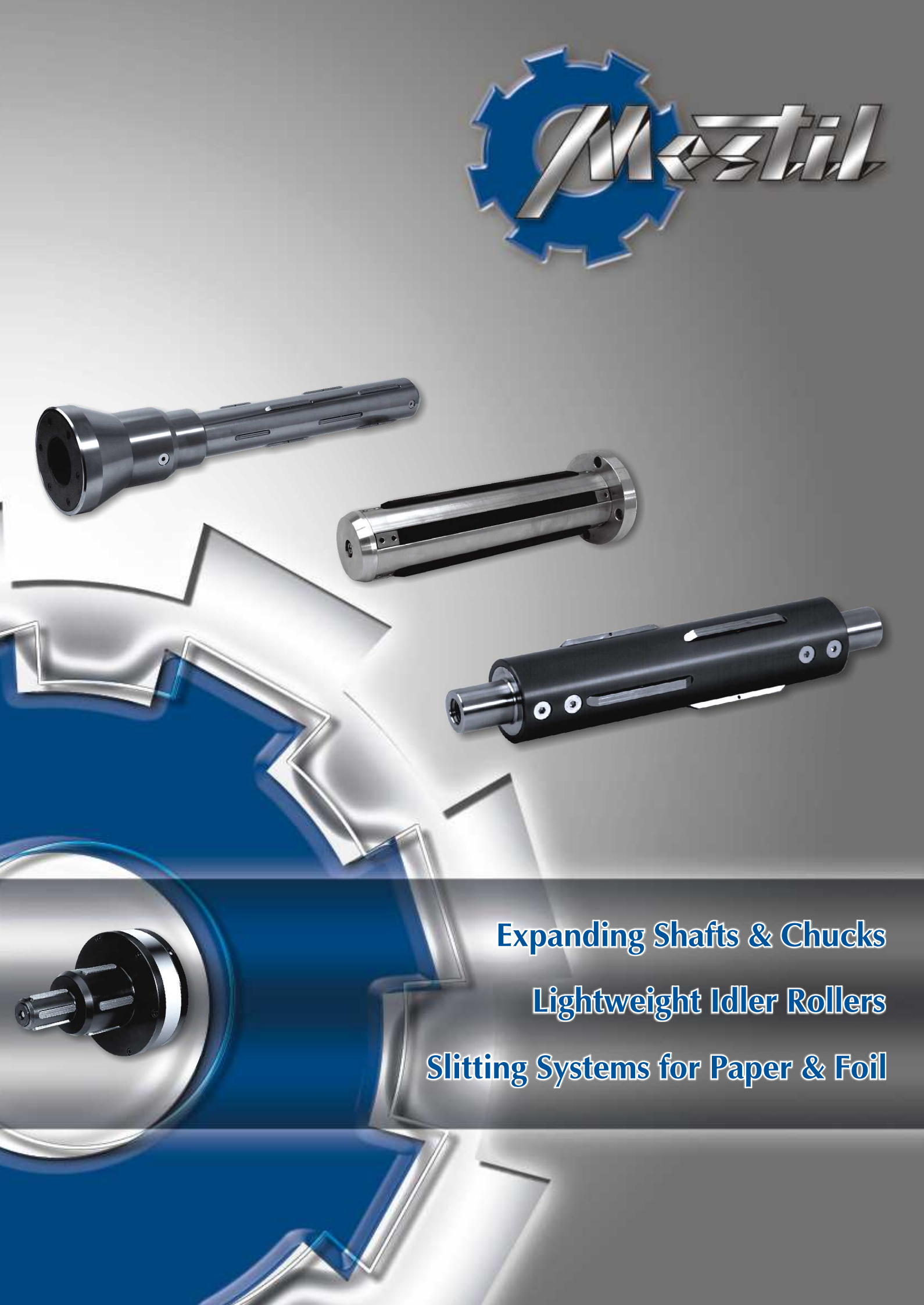

Expanding Shafts & Chucks
Lightweight Idler Rollers
Slitting Systems for Paper & Foil

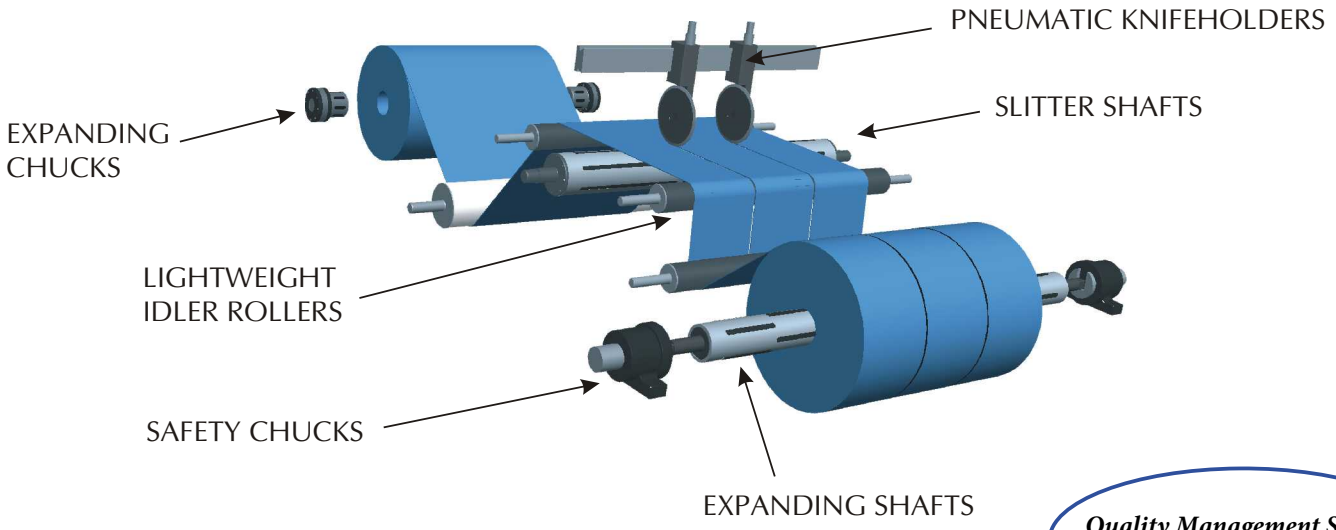
We would like to show you our expanding components, slitting systems and lightweight idler rollers. These products find their application wherever materials wound on rolls are converted, especially in following industries: paper, printing, packaging, plastic and textile.

Our products have been present on Polish and foreign markets for many years and their high quality is confirmed by ISO 9001:2015 Certificate.

Owing to usage of modern machines, proven technology and experience, we are able to design and manufacture the expanding components and slitting systems that are adapted to every machine and to any working conditions. All our products are covered with our full service.

This brochure presents a part of Mestil's offering. To find more, please visit our website at www.mestil.pl.

Application of Mestil's Products in Slitting and Winding Operations



Quality Management System PN-EN ISO 9001:2015

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Airshafts, 500 Series
Lug Type

The chief quality of lug type airshafts is firm pressing against a core, which enables transmitting a high torque. These airshafts are applied wherever a higher tension of material web is required. Solid design makes possible to carry big loads and applied high quality materials and proven design ensure a long life-time. Versatility of airshaft enables their use in most machines.

For cores diameter:	from 12.5 mm to 305 mm
Core material:	paper, plastic, metal
Shaft body material:	steel, aluminium
Lugs:	aluminium, steel, rubber, plastic
Loads:	from small to large
Valve position:	radial, axial or rotary union

Airshafts, 600 Series
Continuous Lug Type

Design of continuous lug type airshafts makes them particularly suitable for winding slit materials. Pressing lugs along the entire operational face of the shaft produce evenly distributed pressure that firmly grips even very narrow webs. The shaft body is commonly made of an aluminium profile, which ensures a light structure and single bladders under continuous lugs make maintenance easier. These airshafts are applied as winding rollers for bobbin cutting machines and wherever a light weight of a shaft is desirable.

For cores diameter:	from 25 mm to 305 mm
Core material:	paper, plastic, metal
Shaft body material:	aluminium, steel
Continuous lugs:	aluminium, rubber
Loads:	from small to medium
Valve position:	radial, axial or rotary union

Airshafts, 700 Series
Leaf Type

Leaf airshafts combine advantages of lug and continuous lug types. Leaves ensure firm gripping pressure evenly distributed along the entire length and circumference of a core. This is the perfect solution for gripping delicate thin-walled cores. For leaf type airshafts, it is possible to wind a web directly on a shaft without any core.

For cores diameter:	from 38 mm to 305 mm
Core material:	paper, plastic
Shaft body material:	steel, aluminium
Leaves:	aluminium, steel
Loads:	from small to large
Valve position:	radial, axial or rotary union

Expanding Chucks for Shaftless Roll Mounting, 800 Series

Pneumatic/Mechanical Type

Pneumatic/mechanical expanding chucks are designed for shaftless mounting rewinds on a machine. The advantage of this solution is the possibility of quick and convenient replacement of even big and heavy rolls. A very big stroke of grips enables gripping the cores with 70 mm and 76.2 mm internal diameter without chuck refitting and additional use of adapters enables quick adaptation to other diameters. The modular design of chucks makes fitting to every machine easier. Chucks are produced for cores with 70 mm to 300 mm diameter. Pumping action is carried out through a valve or rotary union.

Pneumatic Type

With lower loads and lower web speed, pneumatic chucks, designed for shaftless winding/unwinding operations, can be used. Their advantage is simple design and lower price.

Expanding Chucks Shaft-Mounted, 900 Series

Bladder / Lug / Continuous Lug Type

Shaft-mounted expanding chucks expand production abilities in a simple and inexpensive way. They serve as adapters that enable mounting cores with different diameters on a single shaft. They are produced for cores with internal diameter from 70 mm to 350 mm. This is the perfect solution for non-standard diameters.

Mechanical Shafts

Mechanically expanding shafts ensure perfect centering even very heavy rolls. They are used for rewinding delicate materials or at high speeds of a web. Lugs expand through turning the axially positioned hexagonal head screw. This design makes possible using wrenches of different type, inclusive of air operated ones.

Pneumatic/Mechanical Shafts

Pneumatic/mechanical shafts combine advantages of mechanical and air operated expanding shafts. Evenly expanding lugs precisely center a roll and an air cylinder ensures stable and firm core clamping. Pumping action is carried out through a valve or rotary union.

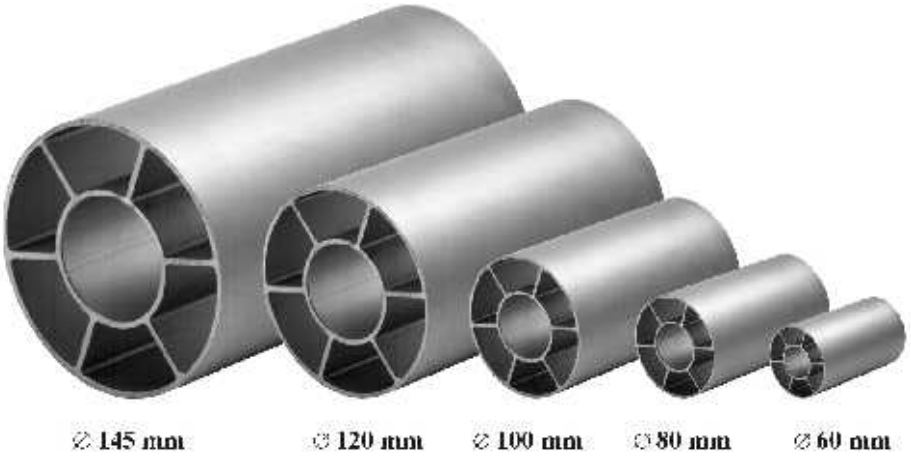
Safety Chucks

Safety chucks are intended for clamping expanding shafts in a machine. The design ensures safety through automatic closing a chuck at shaft turning. Their main advantage is the possibility of fast refitting a machine.

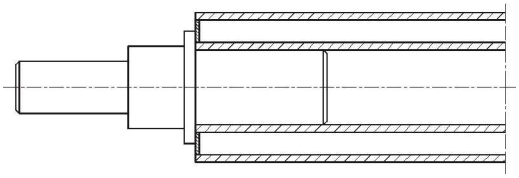
Types of mounting: flange or foot mount
Ends: with a neck or without
Shaft clamping: square, triangle or other on customer's request

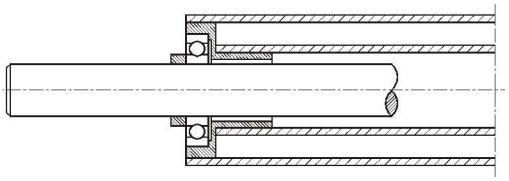
Lightweight Idler Rollers

We offer following highly rigid and light weight aluminium profile tubes:

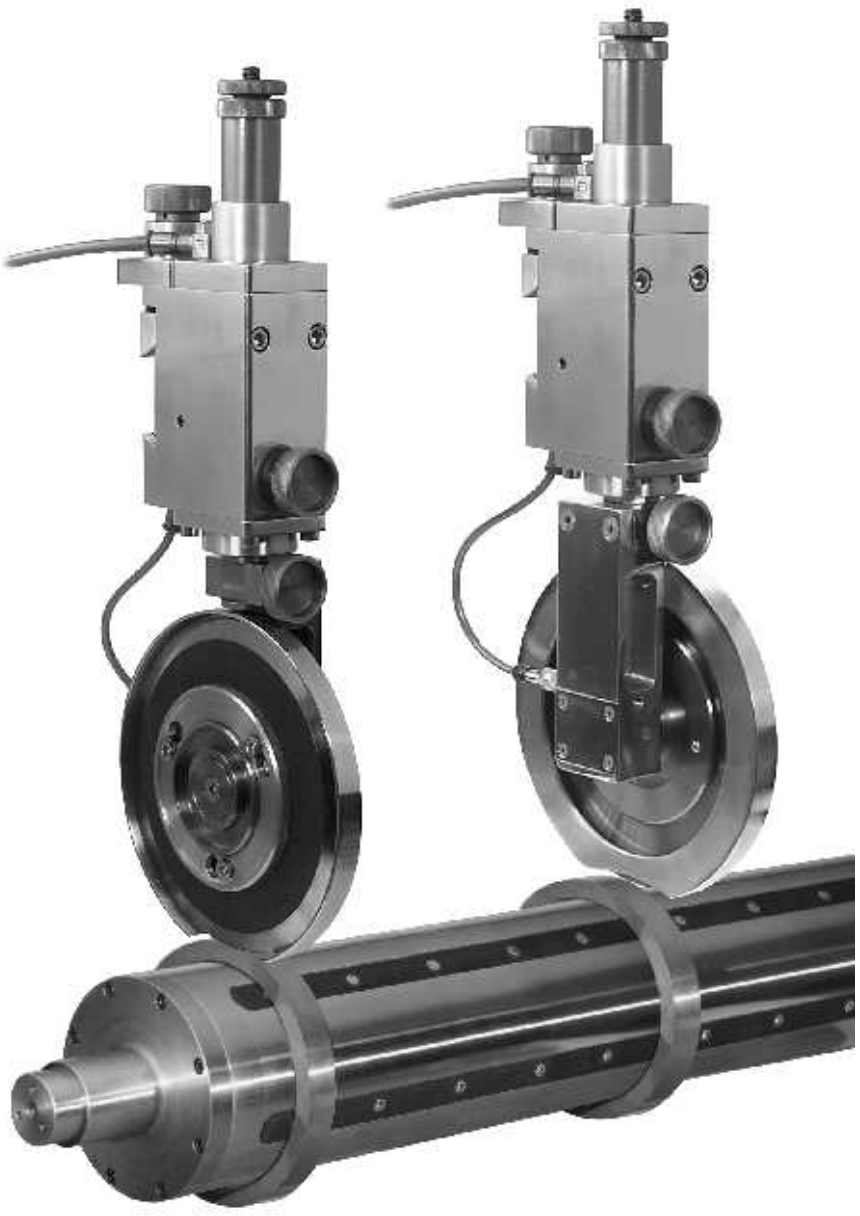


We make complete systems with internal or external bearings, suitable for machines of every type. The light design and small rotational inertia make web speeding up and stopping easier. It is of importance when rewinding delicate webs and on machines with numerous idler rollers.





Slitting Systems for Paper and Foil



Air controlled knifeholders elevate a slitting operation to a higher technical level. Combined with a slitter shaft and counter-knives that are fastened on this shaft, they make the modern and efficient slitting system. We design and produce fastening adapters of any type, depending on a machine type.

Features:
- clean slit edge
- precise positioning
- short installation time
- fast and convenient repositioning

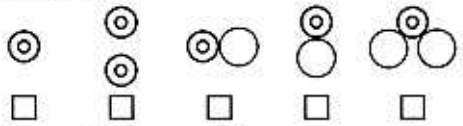
Shaft Quotation Request Form

fax: +48 95 782 36 50
airshafts@mestil.pl

Please return the filled in form by fax or e-mail.

Company: ..... Date: ...../...../20.....
Address: .....
Contact: ..... E-mail: .....
Tel: ..... Mob: ..... Fax: .....

1. Quantity required: .....
2. Core internal diameter: ..... mm
3. Core material: ☐ Cardboard ☐ Plastic ☐ Aluminium ☐ Steel
4. Max roll width: ..... mm
   Max roll weight: ..... kg
5. Min roll width: ..... mm
   Min roll weight: ..... kg
6. Max roll diameter: ..... mm
7. Slit rewind: ☐ Yes ☐ No
8. Min slit width: ..... mm
9. Max number of slits: .....
10. Web material: .....
11. Web thickness: ..... µm
    or grammage: ..... g/m²
12. Max web speed: ..... m/min
    or: ..... rpm
13. Max web tension: ..... N
    or torque: ..... Nm
14. Operation: ☐ Unwind ☐ Rewind
15. Roll support:

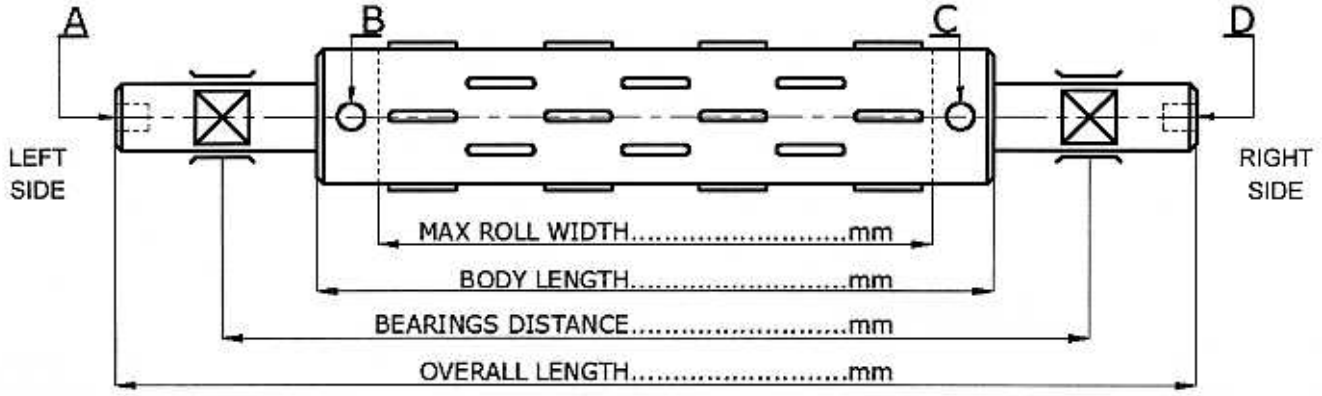


☐ ☐ ☐ ☐ ☐

16. ☐ Center brake or drive
    ☐ Surface brake or drive
17. Roll position on shaft: ☐ Left ☐ Right ☐ Center

Comments:

PLEASE FILL IN DIMENSIONS AND MARK THE VALVE POSITION: **A**, **B**, **C** OR **D**

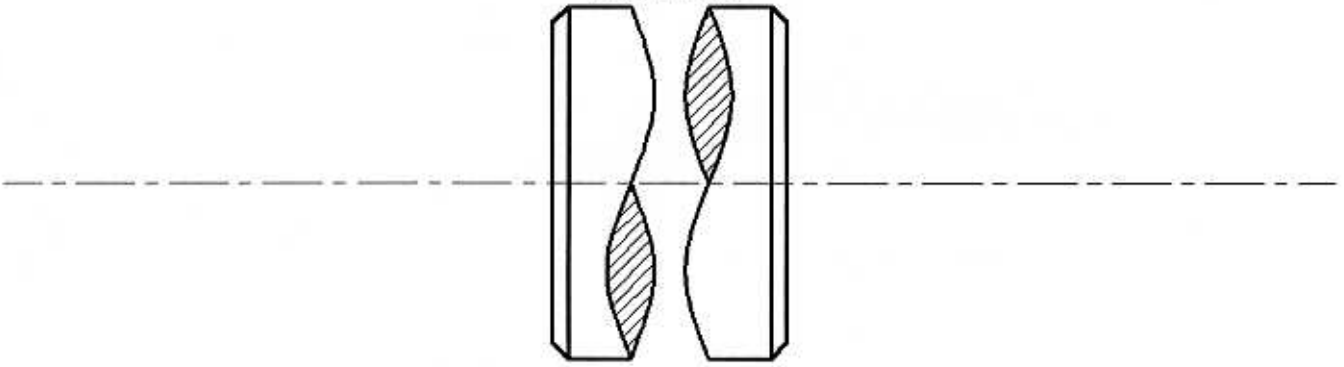


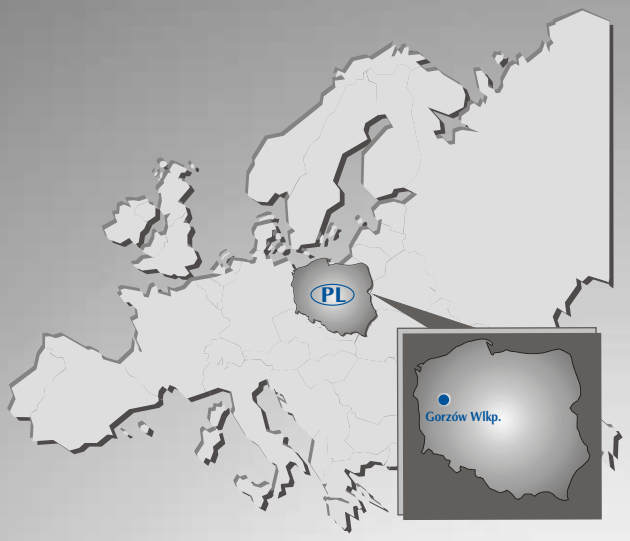
PLEASE SKETCH SHAFT JOURNALS. INDICATE HARDENED AREAS: **XXXXXX**. SEND SHAFT DRAWING IF AVALIABLE.

LEFT JOURNAL SKETCH

SHAFT BODY

RIGHT JOURNAL SKETCH





Complete Mestil's Offerring

- PRODUCTION OF:
  - spare parts and machine subassemblies on NC and conventional machine tools
  - expanding shafts and chucks
  - injection moulds and plastic parts
  - power and industrial installations.

- INVESTMENT PROJECTS
  - relocation of machines and factories
  - assembly and start up of industrial installations
  - transportation of big and heavy components on air bags

DESIGN OF:
- machines and structures
- industrial installations and production lines
- injection moulds and tooling

- REPAIRS OF:
  - industrial equipment and machines
  - air-conditioning equipment, installations and chemical apparatus
  - power engineering equipment, pumps, compressors and lifting devices
  - machine tools for metal and wood working

- RENOVATION OF:
  - industrial accessories and tools
  - surfacing through metallization and ceramic powder application
  - gas-shielded welding

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