

EXPANDING UNIVERSAL MANDRELS SPECIFICATIONS

Ergonomic Handling Systems

Our Universal Mandrels are at the heart of all handling systems, enabling our devices to lift and turn rolled materials by securely gripping the inside of the roll's paper, plastic or metalcore, without slipping and without substantial damage to the core. Universal Mandrels fit all types of handling equipment and can be changed in seconds without tools.

Universal Mandrels are fail-safe. Grippers expand automatically by spring force. Simply insert the mandrel into the core and lift the roll. The grippers remain expanded until the load is fully supported. Only then can the grippers be retracted by the operator. Grippers can be retracted manually with toggle or 'T' handles attached directly to the mandrel or remotely for increased operator convenience with pneumatic, manual or electric retractors. Universal Mandrels are available with a number of gripper surface profiles to ensure the safest grip with the least possible damage to the core.

Important Note - we cannot guarantee the performance of its grippers in all applications. Some applications may require experimenting with different gripper surface profiles to find the best fit with your cores. Consult our sales representatives for recommendations of which gripper type is best suited for your application.

LIFT · TURN · TRANSPORT · LOAD · UNLOAD
· STACK · STORE · PACKAGE · PALLETISE

The stats don't lie! Workplace safety is important!

'Back Injuries' are the nations number one workplace safety problem! A problem that even spans internationally. According to the United States Department of Labor, it is reported that more than one million workers suffer back injuries in the country each year. This costs the industry billions of dollars on top of the pain and suffering borne by employees. In Australia, Safe Work Australia reports that \$61.8 billion dollars was spent on work related injuries and 90% of claims made were due to injury (December 2017). Our Ergonomic Handling Systems will minimise or eliminate the risk of operator injury and maximise productivity and profits.

Standard Features:

Rugged and durable.
Automatic expansion 'fail-safe'.
Change sizes with no tools.
Universal - fits all MH equipment.
Easy to change wear parts.
Aluminium or alloy steel construction.
Anodized or nickel plated finish.
Made in U.S.A.

Specifications:

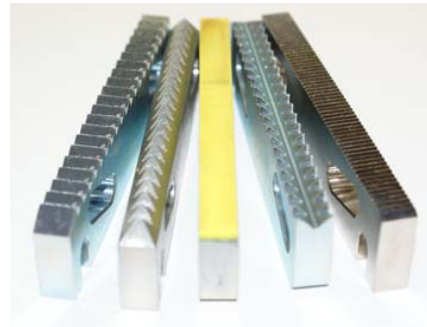
Maximum Load Capacity -
Up to 1000kg
Depending on handling equipment type
Core diameters - 50mm to 406mm

Standard Features:

Custom Length.
Core Stop.
Bumper Nose.
Pneumatic and Manual Retract Kit.
Spare Mandrel Holder.
Powered Remote Retract.
Rollers.
Stainless Steel Hardware.
Rotating.
Mandrel Insertion Depth Graduations.
High Use Upgrade Package.



Left to right: 150mm mandrel with pneumatic retract, 75mm toggle retract, 75mm 'T' handle retract, 50mm urethan mandrel with locking toggle handle and 150mm leaf-type mandrel with pneumatic expand and retract.



Numerous gripper surface profiles are available.

Left to right: Standard, Prianha, Urethan, Shark and Fine-Tooth.

Minimise Risk. Maximise Profits!

- **Low Cost**
- **Modular Design**
- **Simple Function**
- **Made In U.S.A.**
- **Safe, Easy and Economical**

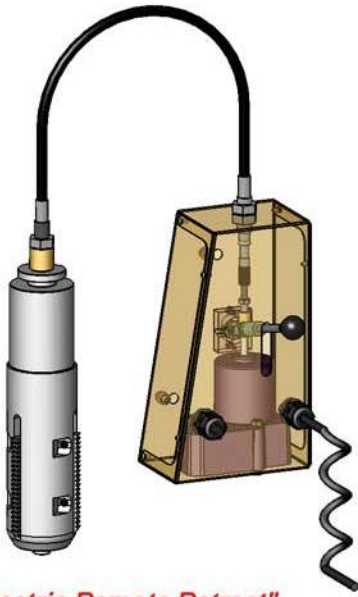
Australia Wide Sales & Service

sales@materialshandling.com.au | www.materialshandling.com.au | 1300 25 84 07

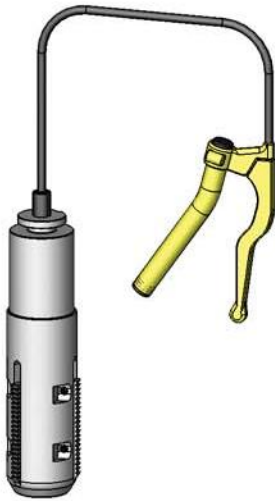
MATERIALS
Handling PTY LTD *Working with ease.*

Ergonomic Handling Systems - Mandrel Options & Accessories

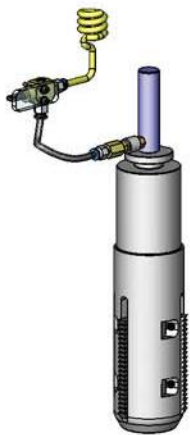
REMOTE RETRACT OPTIONS



"Electric Remote Retract"

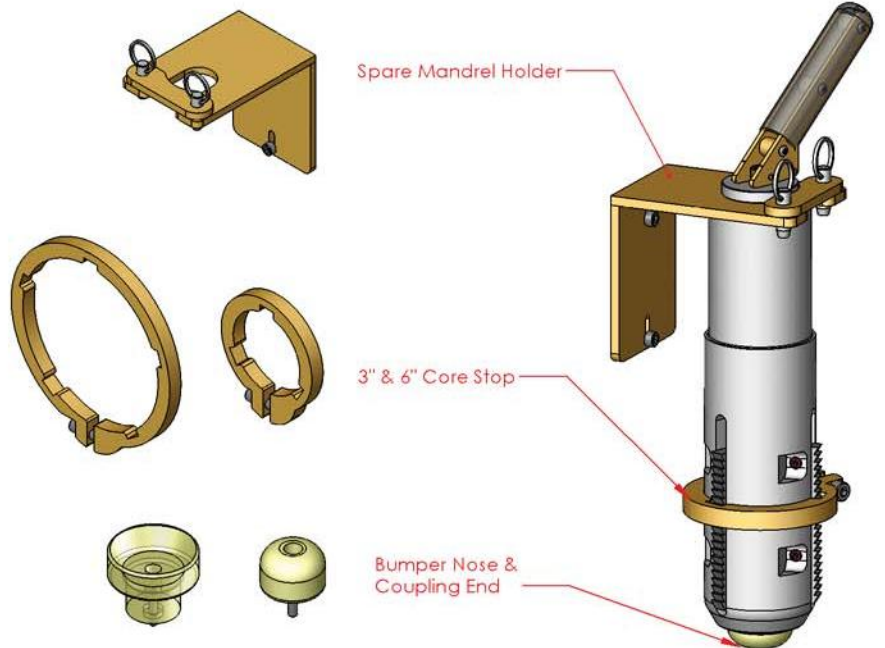


"Manual Remote Retract"

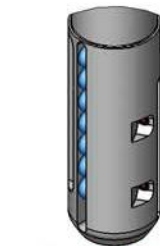


"Pneumatic Remote Retract"

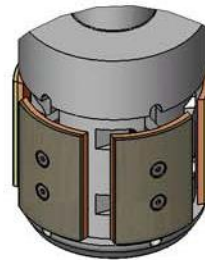
ACCESSORIES OFFERED



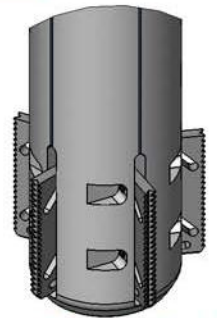
GRIPPER MODIFICATIONS OFFERED



"Transfer Rollers"
(replaces one gripper)

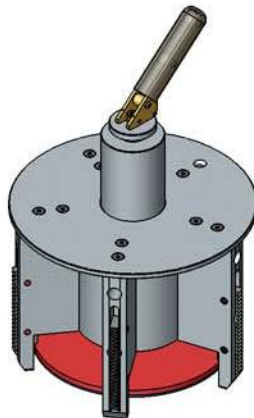


"Leaf Segments"
(Urethane)



"Increased Expansion Range"
and
"Indicator Marks"

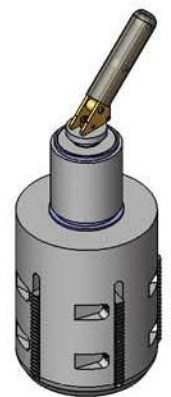
SAMPLE CUSTOM MANDRELS



"LT Standoff Mandrel"
(large core diameters)
(light weight design)



"Custom Couplings
and Spindle Alignment
Features Available"



"Rotating Mandrel"
(mandrel rotates to
allow material winding)

Ergonomic Handling Systems - 75mm (3-Inch) Standard Mandrel

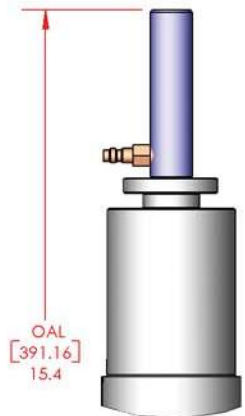
Fail-safe, spring force expanded grippers
 Aluminum body, clear hardcoat anodized
 Lightweight design, approx. {8 lb. (3.6 Kg)}
 Dimensions subject to change
 * Custom configurations available

RETRACTION METHODS



"T-Handle"

Most common machines:
(MRT, HRL, VRL)



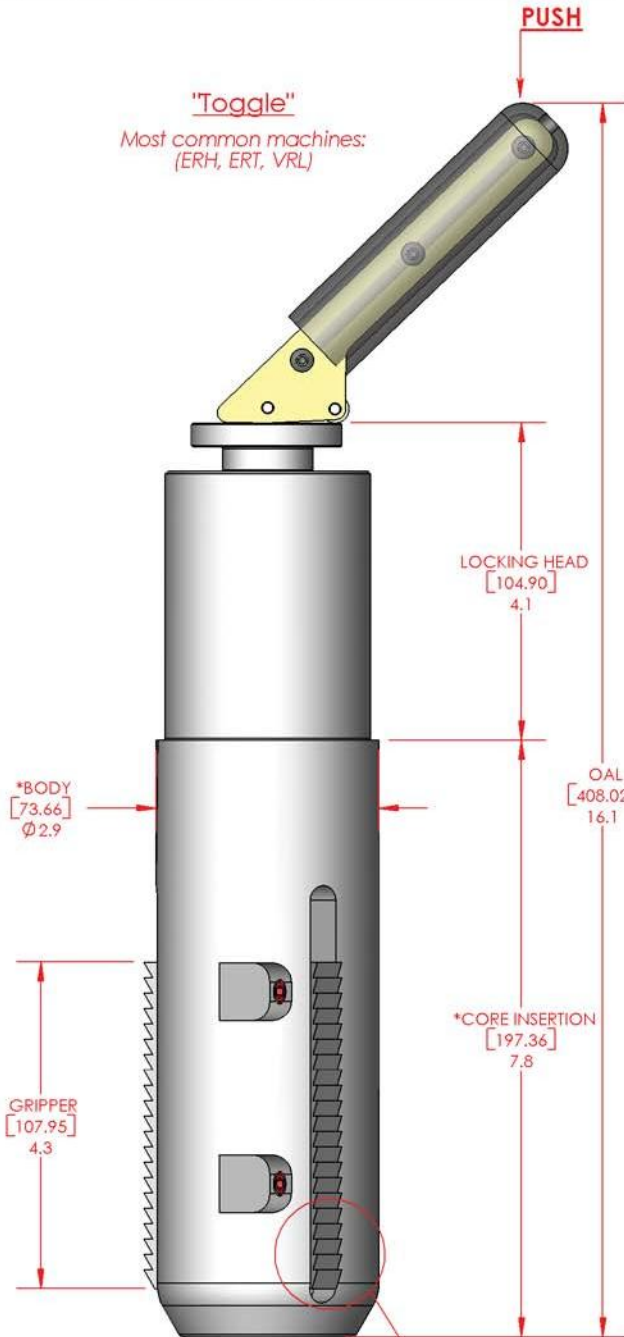
"Pneumatic"

Most common machines:
(MRT, HRL, VRL, ERT)
 Continuous air supply present (50 psi min.)
 Pneumatic Retract Kit Sold Separately



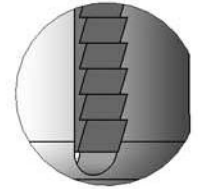
"Remote"

Most common machines:
(ERH, ERT)
 Electric Remote Retract (24VDC, 110VAC)
 or
 Manual Remote Retract (Cable & Hand Lever)
 Remote Retract Kits Sold Separately

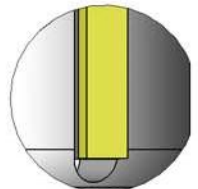


"Toggle"
 Most common machines:
(ERH, ERT, VRL)

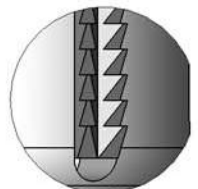
GRIPPER PROFILES



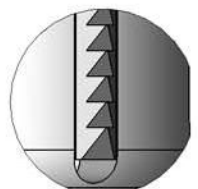
"Standard"
 Cardboard cores
 Most common applications



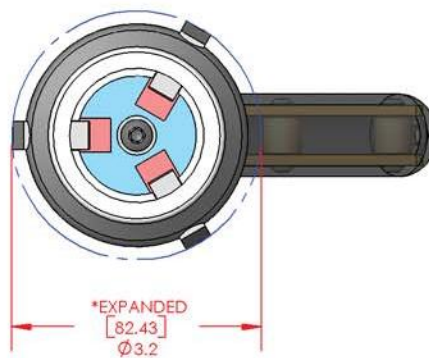
"Urethane"
 Steel, Aluminum Cores
 Non-marking 60-70 shore A



"Shark Tooth"
 PVC, Hard Cardboard Cores
 Double Edge Contact



"Piranha Tooth"
 PVC, Hard Cardboard Cores
 Single Edge Contact -High Wear



***EXPANDED**
 [82.43]
 Ø3.2

Ergonomic Handling Systems - 150mm (6-Inch) Standard Mandrel

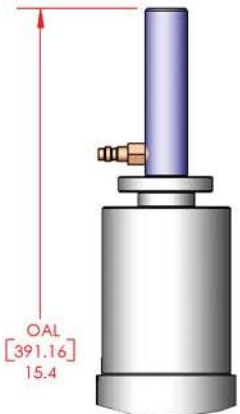
Fail-safe, spring force expanded grippers
 Aluminum body, clear hardcoat anodized
 Lightweight design, approx. {20 lb. (9 Kg)}
 Dimensions subject to change
 * Custom configurations available

RETRACTION METHODS



"T-Handle"

Most common machines:
(MRT, HRL, VRL)



"Pneumatic"

Most common machines:
(MRT, HRL, VRL, ERT)
 Continuous air supply present (50 psi min.)
 Pneumatic Retract Kit Sold Separately

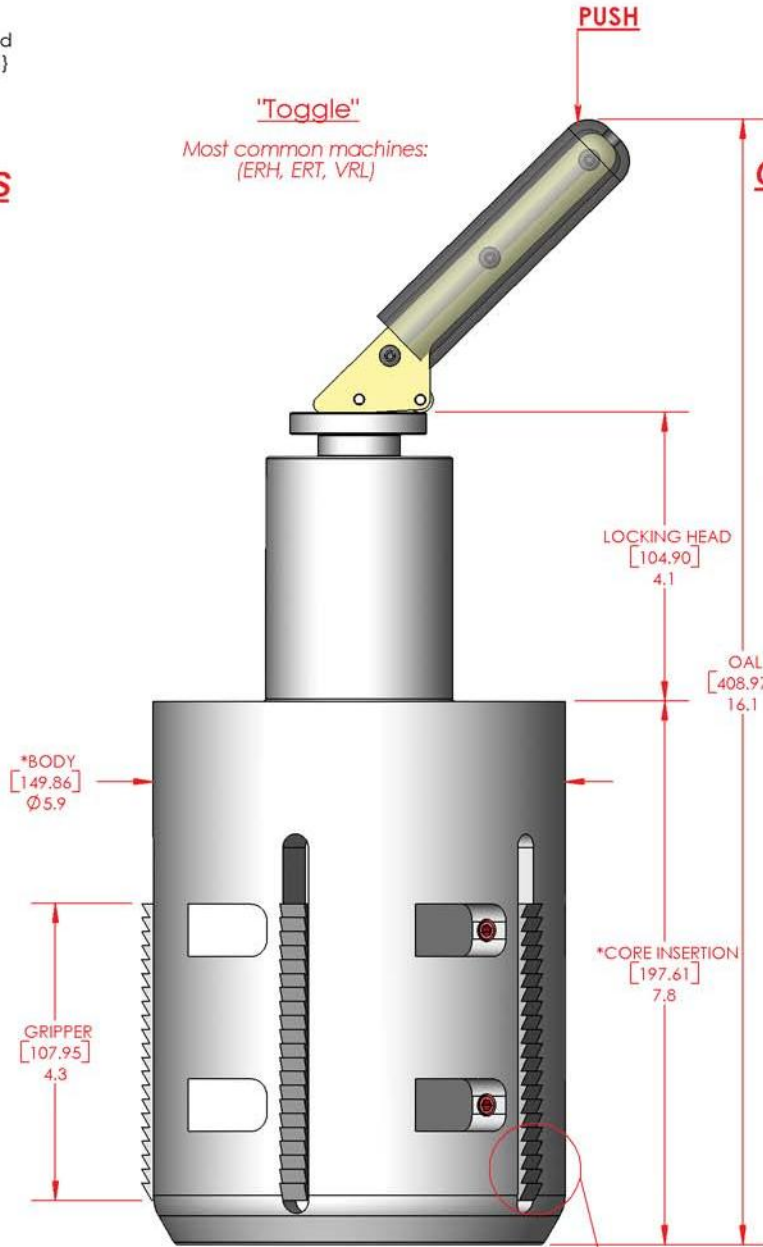


"Remote"

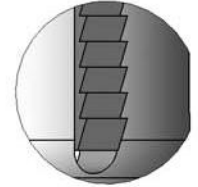
Most common machines:
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"Toggle"

Most common machines:
(ERH, ERT, VRL)

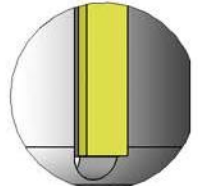


GRIPPER PROFILES



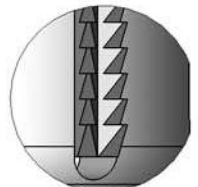
"Standard"

Cardboard cores
 Most common applications



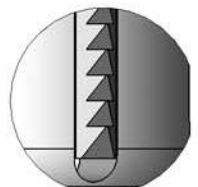
"Urethane"

Steel, Aluminum Cores
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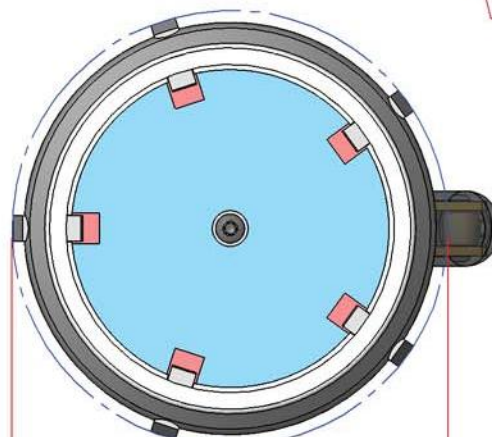
"Shark Tooth"

PVC, Hard Cardboard Cores
 Double Edge Contact



"Piranha Tooth"

PVC, Hard Cardboard Cores
 Single Edge Contact -High Wear



*EXPANDED
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 Ø 6.2