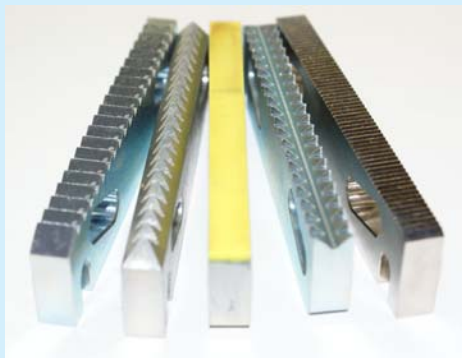


# Working with ease...

## Ergonomic Handling Systems



Left to right: 6" mandrel with pneumatic retract, 3" toggle retract, 3" "T" handle retract, 50 mm urethane mandrel with locking toggle handle and 6" leaf-type mandrel with pneumatic expand and retract.



Numerous gripper surface profiles are available. Left to right: Standard, Piranha, Urethane, Shark and Fine-tooth.

**LIFT · TURN · TRANSPORT · LOAD · UNLOAD  
· STACK · STORE · PACKAGE · PALLETIZE**

"Back Injuries - Nations Number One Workplace Safety Problem." The U.S. Department of Labor reports that more than one million workers suffer back injuries in the U.S. each year, costing industry billions of dollars on top of the pain and suffering borne by employees. 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  
Aluminum or alloy steel construction  
Anodized or nickel plated finish  
Made in U.S.A.

### Specifications:

Maximum load capacity: Up to 2,200 lbs (1000kg)  
depending on handling equipment type  
Core diameters 2" (50 mm) to 16" (406 mm)

### Options & Accessories:

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

**Minimise Risk. Maximise Profits!**

**MATERIALS**  
**Handling** *Working with ease...*  
PTY LTD

Our website: [www.materialshandling.com.au](http://www.materialshandling.com.au)  
Phone us: 1300 65 00 35 Fax us: 1800 68 68 96  
Email us: [sales@materialshandling.com.au](mailto:sales@materialshandling.com.au)

**Australia Wide Sales and Service**

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

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 metal core, 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.

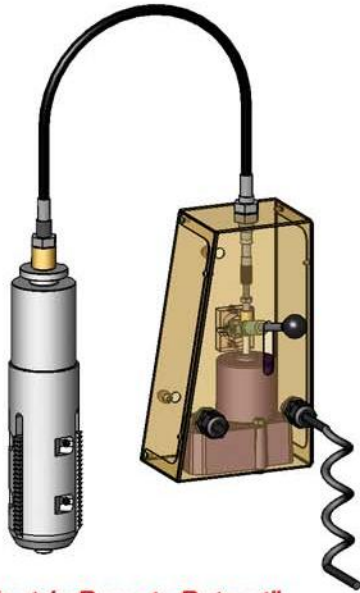
Grippers can be retracted manually with toggle or "T" handles attached directly to the mandrel, or remotely for increased operator convenience with pneumatic, manual or electric retractors .

**Universal Mandrels** are available with a number of gripper surface profiles to ensure the safest grip with the least possible damage to the core.

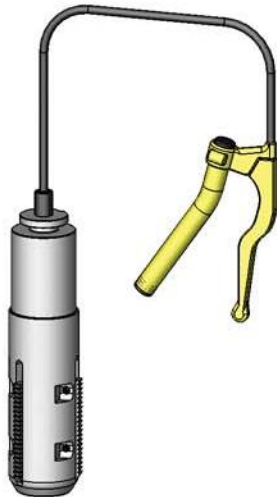
Important Note! We cannot guarantee the performance of its grippers in all applications. Some applications may require experimenting with different gripper surface profiles to find the best fit with your cores. Consult for recommendations of which gripper type is best for your application.

**Expanding Mandrels**

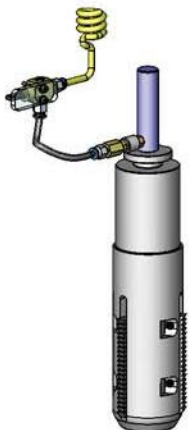
### REMOTE RETRACT OPTIONS



**"Electric Remote Retract"**

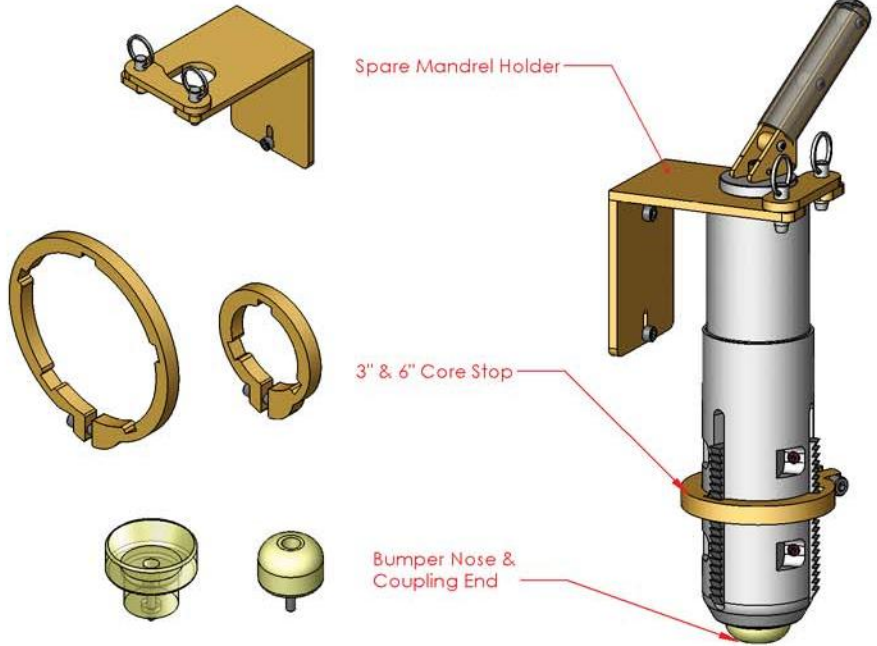


**"Manual Remote Retract"**

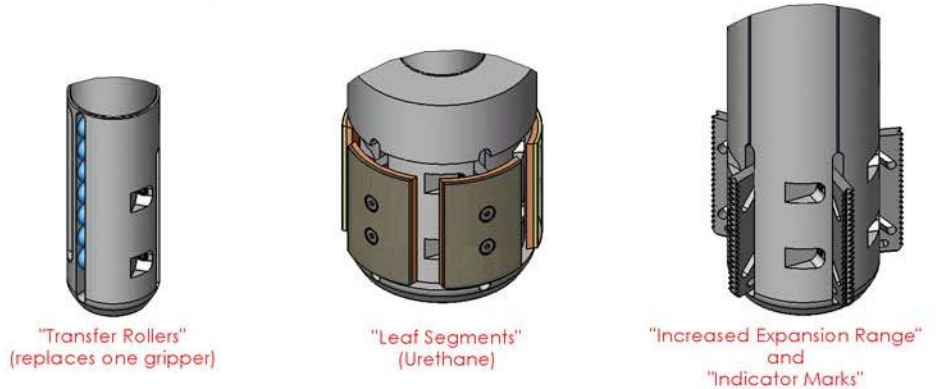


**"Pneumatic Remote Retract"**

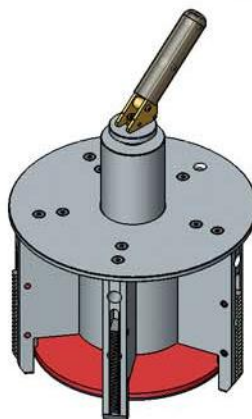
### ACCESSORIES OFFERED



### GRIPPER MODIFICATIONS OFFERED



### 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)

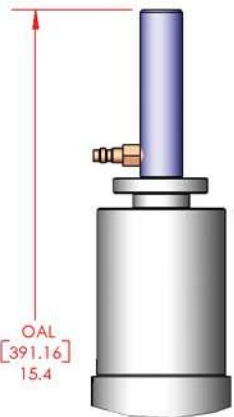
Fail-safe, spring force expanded grippers  
 Aluminum body, clear hardcoat anodized  
 Lightweight design, approx. {8 lb. (3.6 Kg)}  
 Dimensions subject to change  
 \* Custom configurations available

### RETRACTION METHODS



**"T-Handle"**

Most common machines:  
 (MRT, HRL, VRL)



**"Pneumatic"**

Most common machines:  
 (MRT, HRL, VRL, ERT)

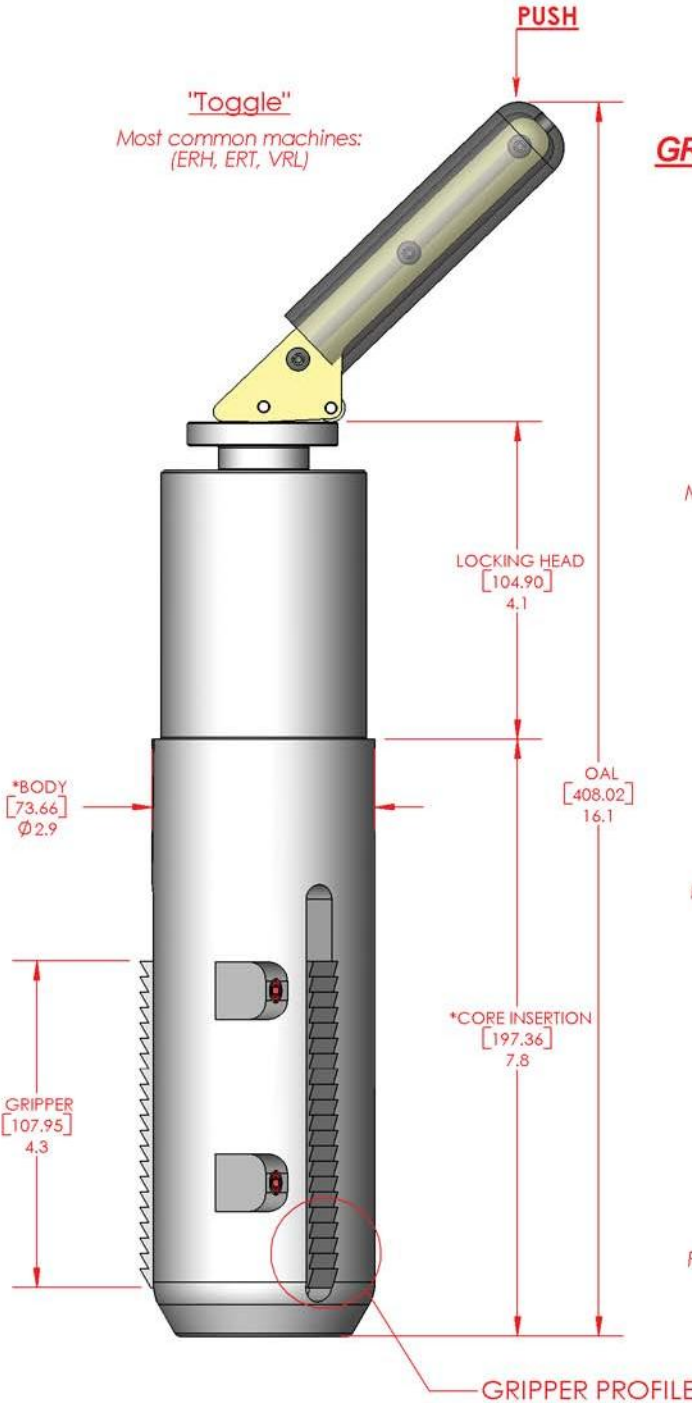
Continuous air supply present (50 psi min.)  
 Pneumatic Retract Kit Sold Separately



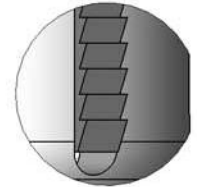
**"Remote"**

Most common machines:  
 (ERH, ERT)

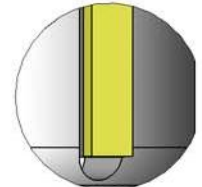
Electric Remote Retract (24VDC, 110VAC)  
 or  
 Manual Remote Retract (Cable & Hand Lever)  
 Remote Retract Kits Sold Separately



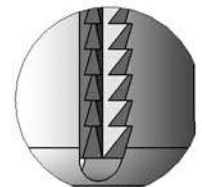
### GRIPPER PROFILES



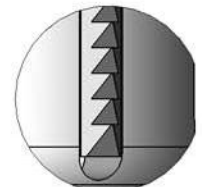
**"Standard"**  
 Cardboard cores  
 Most common applications



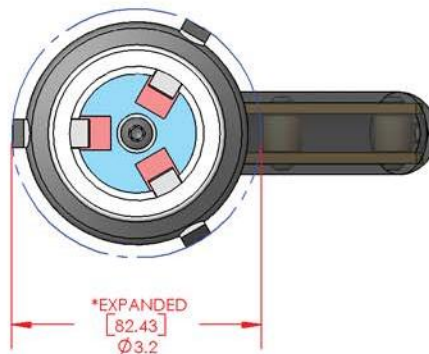
**"Urethane"**  
 Steel, Aluminum Cores  
 Non-marking 60-70 shore A



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



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





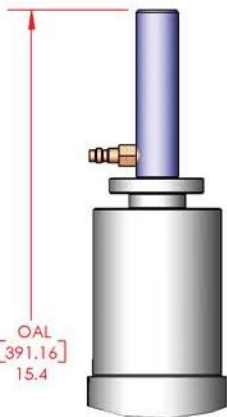
Fail-safe, spring force expanded grippers  
 Aluminum body, clear hardcoat anodized  
 Lightweight design, approx. {20 lb. (9 Kg)}  
 Dimensions subject to change  
 \* Custom configurations available

### RETRACTION METHODS



**"T-Handle"**

Most common machines:  
(MRT, HRL, VRL)



**"Pneumatic"**

Most common machines:  
(MRT, HRL, VRL, ERT)

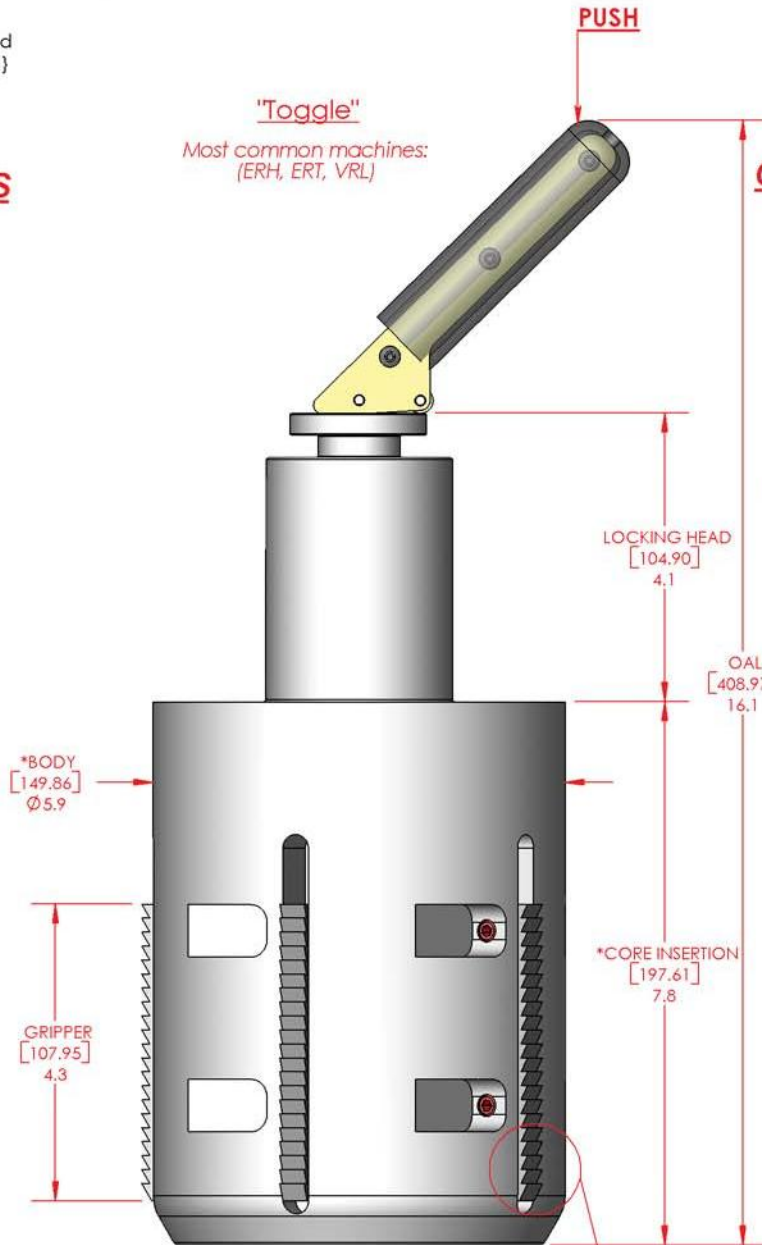
Continuous air supply present (50 psi min.)  
 Pneumatic Retract Kit Sold Separately



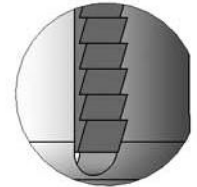
**"Remote"**

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

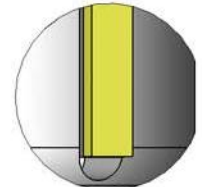
**"Toggle"**  
 Most common machines:  
(ERH, ERT, VRL)



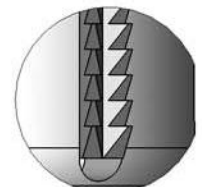
### GRIPPER PROFILES



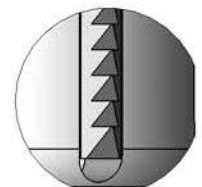
**"Standard"**  
 Cardboard cores  
 Most common applications



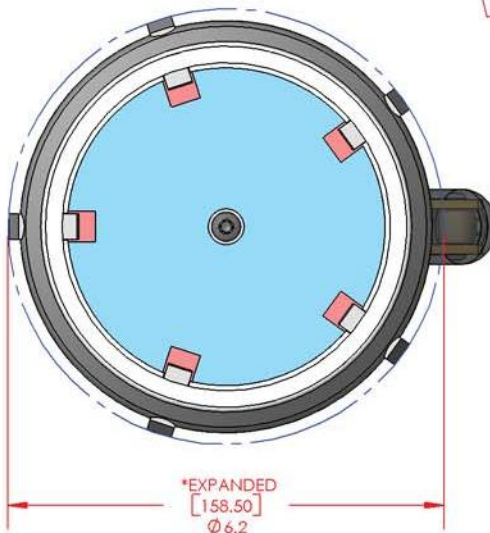
**"Urethane"**  
 Steel, Aluminum Cores  
 Non-marking 60-70 shore A



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



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



**\*EXPANDED**  
 [158.50]  
 Ø6.2

GRIPPER PROFILE