



## RMS Equipment LLC

1545 Industrial Parkway

Akron, Ohio, USA 44310

Tel : ++1 330 564 1360

Fax : ++1 330 564 1389

Email : [rmssales@rmsequip.com](mailto:rmssales@rmsequip.com)

Web : [www.rmsequip.com](http://www.rmsequip.com)

---

## RMS MINI SINGLE ROLL ROLLER DIE (MINI-SRRD)



The innovative and cost effective RMS Mini-SRRD is the perfect answer either as a stand-alone system to produce strips or profiles, or as a retrofit to an existing line to add components to wider products. This unit achieves the strict dimensional tolerances demanded today that cannot be satisfied by conventional pressure head extrusion systems.

The Mini-SRRD is a further development of the original SRRD first patented by RMS in 1973 and combines the flexibility and economy of a simple extruder head with the accuracy and control of a calender. This enables profile dimensions to be quickly altered using low cost die arrangements.

The extruded compound is passed through a changeable cavity profile to a fixed die plate which is tangent to the driven roller surface. The compound is pulled past the die plate (which can be profiled or flat) by the rotating roll. This process allows for very low pressures and lower temperature extrusions which translate to dimensional accuracy and higher productivity.

**RMS Pride – A Tradition**  
Member of the Pettibone Tire Equipment Group

## WHAT ARE THE ADVANTAGES?

- Improved dimensional accuracy of extruded flat or profiled components.
- Maintains dimensional consistency at different speeds
- Suitable for temperature sensitive compounds.
- Can extrude single or multiple components.
- Compact and flexible system for production or development applications.
- Eliminates die swell due to the pull extrusion principle.
- Suitable for undercut profiles that cannot be calendered.
- Enables extrusions to be produced at increased line speeds.
- Reduces extrusion temperatures due to lower head cavity pressures.
- Inexpensive and quick-change (under 1 minute) dies for different products.
- Most compounds will run trim-less.
- Quick and easy head clean out.
- Can be used with any cold or hot feed extruder (typically up to 200mm).
- Suitable for applications including apex, gum edge strips, bead tape wrap, over strips or adding an additional component onto an existing line.
- A breaker plate (strainer arrangement) can be incorporated.

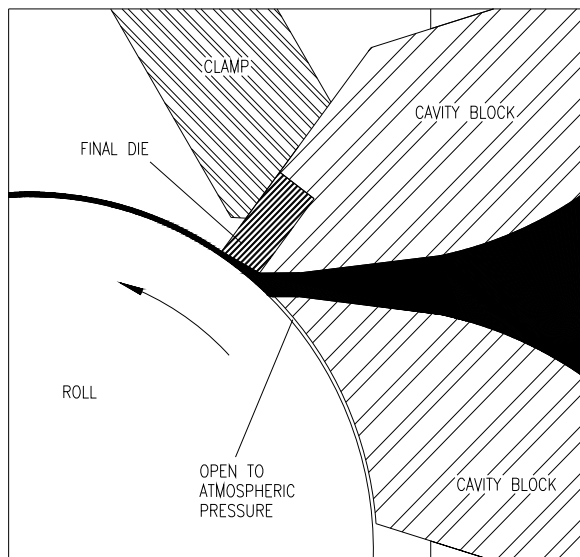


## PUSH “v” PULL PRINCIPLE

The RMS Mini-SRRD is based on a widely accepted system in the rubber industry first patented by RMS in 1973 that incorporates the use of a single driven roller.

Most extrusion systems rely on the “push” principle where compounds are forced with high compression ratios and high pressure out of the die. Die swell characteristics and high temperatures caused by the high pressures can no longer be tolerated with modern dimensional requirements and production needs.

RMS has developed the Mini-SRRD that uses the “pull” principle. The compound is brought to the roll face where it is exposed to the atmosphere thus eliminating the high compression ratios and high pressure of the “push” system. This allows for higher productivity on temperature sensitive compounds. The “pull” principle uses the roll surface to pull the compound past the shaping die with no die swell. The result is a dimensionally accurate and table product at lower cost.



## SPECIFICATION:

(Other ranges can be provided)

- Maximum width of the product
- Maximum thickness of the product
- Main roll diameter
- Main roll surface speed (maximum)
- Power supply

### Mini-SRRD200

8" (200mm)  
0.300" (7.5mm)  
6" (150mm)  
113 ft/min (34.4m/min)  
460v / 3 Ph / 60 Hz

### Mini-SRRD400

15.7" (400mm)  
0.47" (12mm)  
8" (203mm)  
197.ft/min (60m/min)  
460v / 3 Ph / 60 Hz

## OTHER RMS EQUIPMENT

- Single and Co-Extrusion Heads
- Downstream Equipment
- Mini Calenders
- 1st & 2<sup>nd</sup> Stage Tire Building Machines

- Pin & Smooth Barrel Extruders
- Slab Feeders
- Temperature Control Units
- Complexing or Component Pre-Assembly