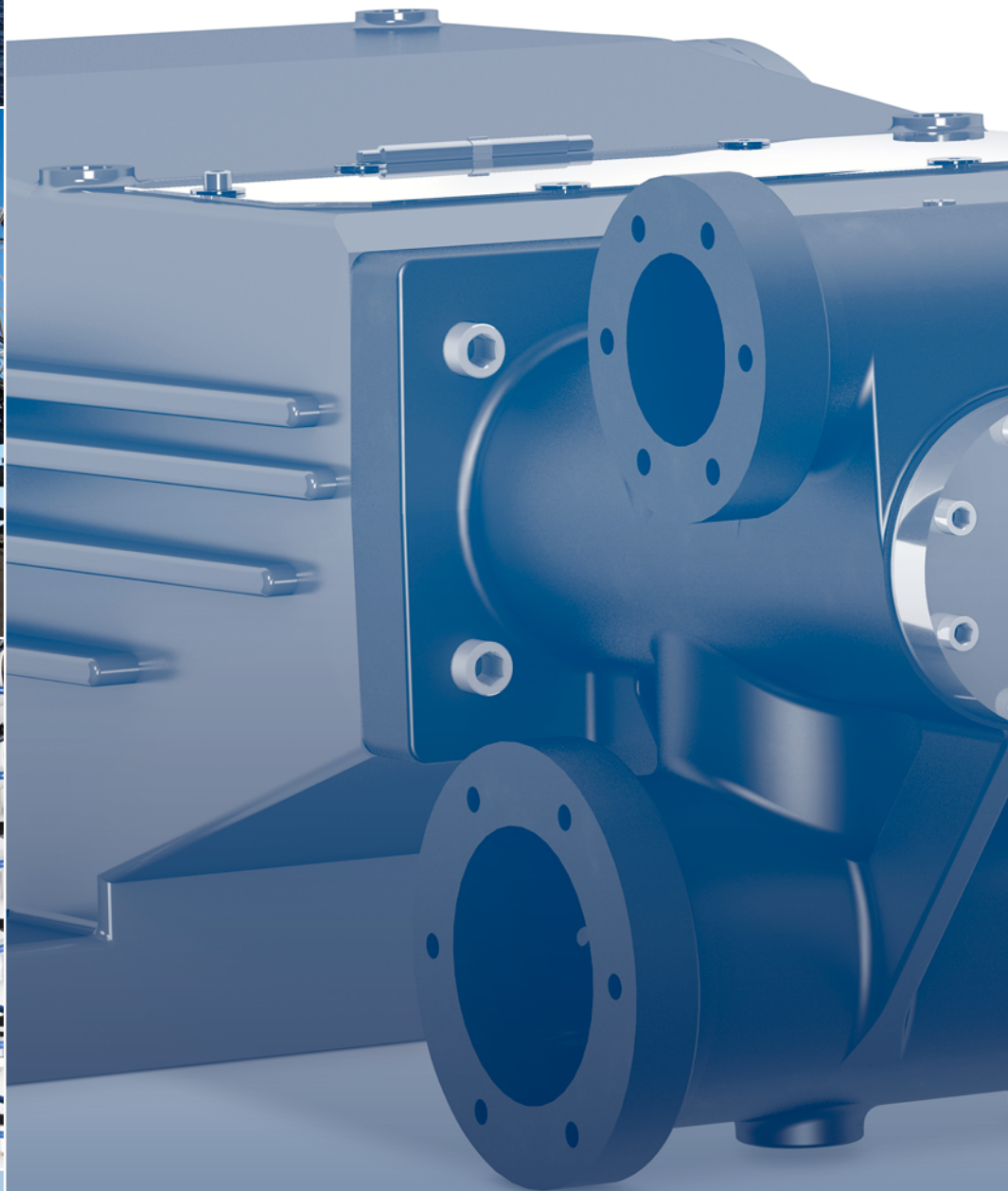




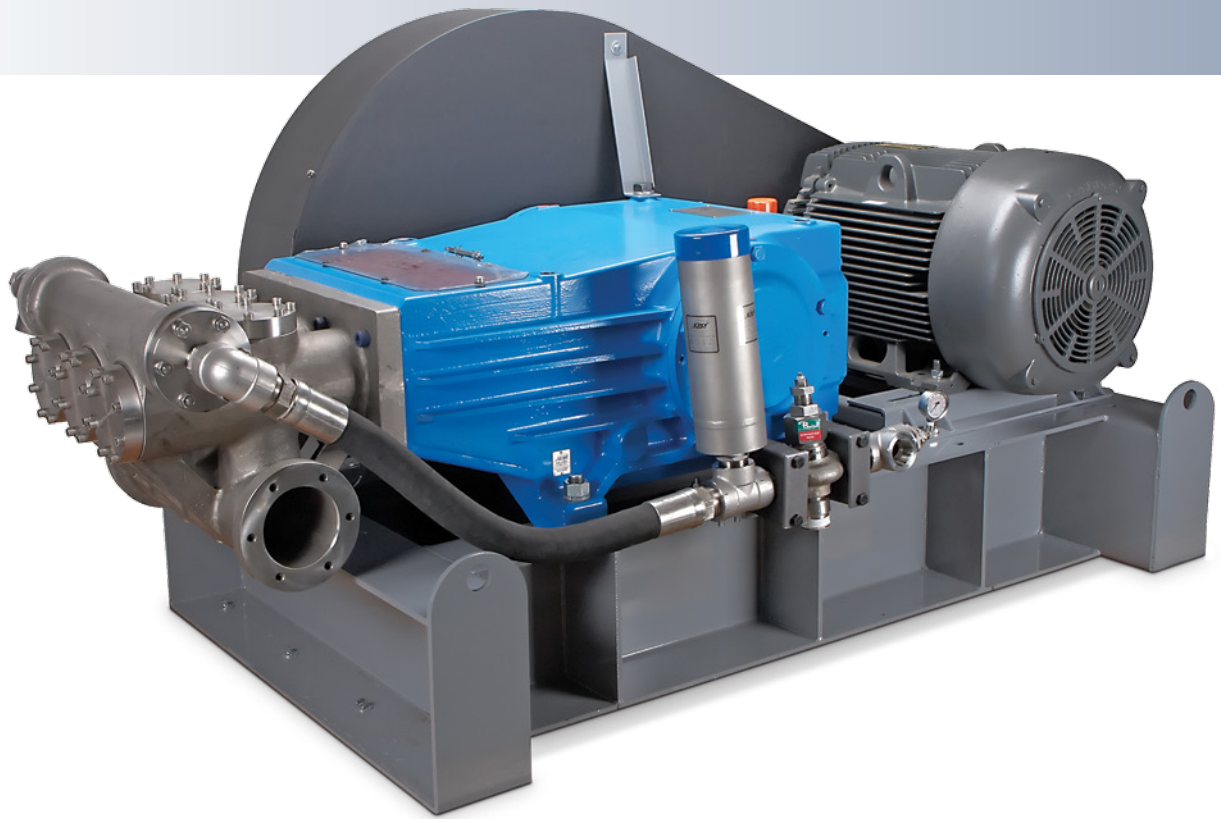
**RAM PUMPS**

Meeting The Toughest Challenges



# 150 HCH SERIES

Triplex Plunger Pumps



## Quality Products, Exceptional Customer Service

RAM Pumps Ltd.'s portfolio of Triplex & Quintuplex pump packages are designed and manufactured to the highest degree of precision to ensure total reliability and durability is maintained throughout our range.

RAM Pumps design is in full compliance to API674 along with most industry standards including, ISO 9001/2008, ATEX, EC P.E.D., NACE, Norsok, and GOST. These standards are rigorously maintained to ensure complete inclusion into the most arduous and demanding applications worldwide.

RAM Pump's commitment to flexible design and scope conformance has supported the evolution of a truly comprehensive supply. Including such auxiliary options as:

- Self-driven lubrication systems for both drive and seal arrangements.
- Condition monitoring to customer expectation and specification
- Multiple drive options and adaptations
- Direct mounting of dampers, PVS's etc. to the process fluid end for maximum effectiveness.

---

## Common Applications Include:

### Oil and Gas

Glycol Injection or  
Regeneration  
Methanol Injection  
Hydrocarbon Condensate  
Hydro Test

### Water Production

Drill Cutting Re-Injection  
Miscible Gas Injection  
Fracking  
Liquid Condensate  
Injection

### Reverse Osmosis

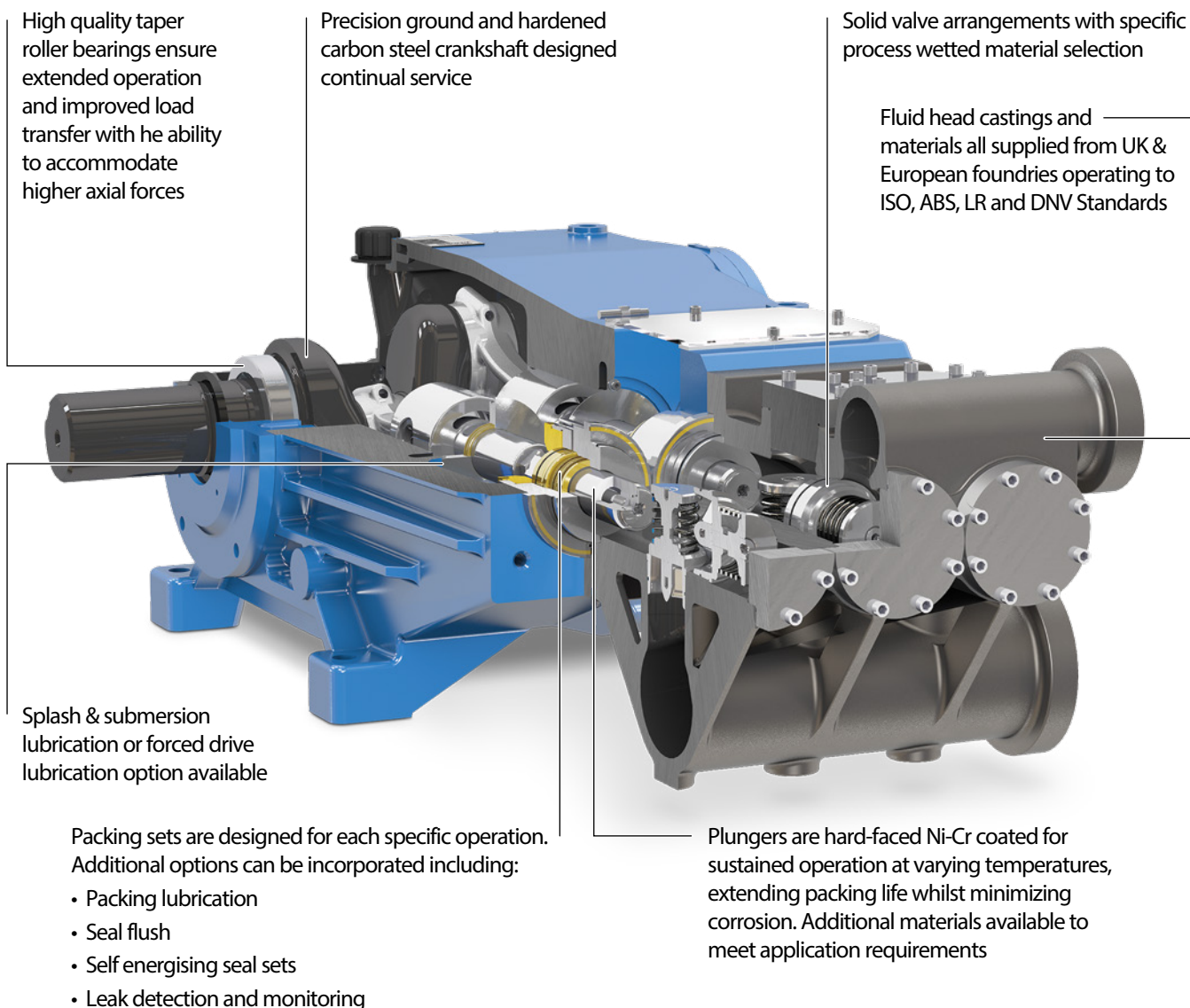
Desalination  
Food Processing  
Pharmaceuticals

### Industrial

Water Jetting  
De-Scaling  
Boiler Feed



# Quality Focused Design and Manufacturing



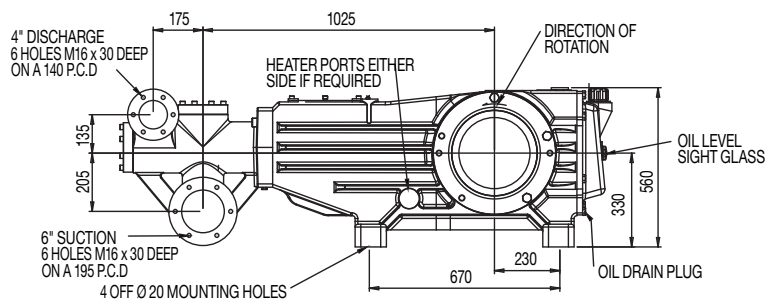
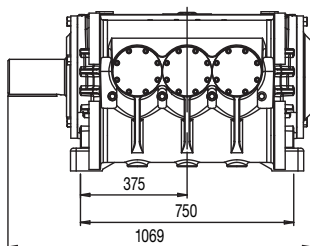
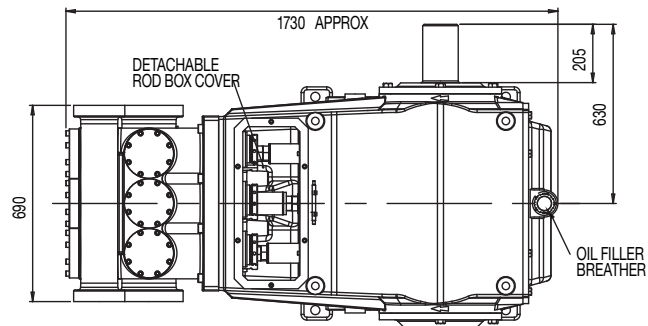
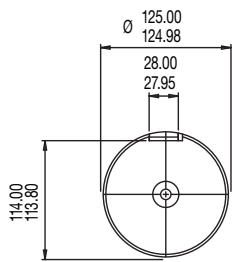
## RAM 150 HCH PERFORMANCE

Bore	Stroke	Max RPM (API)	Max RPM (Non API)	Max Flow (API) lpm / gpm	Max Flow (Non-API) lpm / gpm
100	150	270	360	907 / 239.5	1,209 / 319.3
95	150	270	360	818 / 216.1	1,091 / 288.2
90	150	270	360	734 / 194	979 / 258.6
85	150	270	360	655 / 173	873 / 230.7
80	150	270	360	580 / 153.3	774 / 204.4
75	150	270	360	510 / 134.7	680 / 179.6
70	150	270	360	444 / 117.3	592 / 156.5
65	150	270	360	383 / 101.2	511 / 134.9
60	150	270	360	326 / 86.2	435 / 115
55	150	270	360	274 / 72.4	366 / 96.6

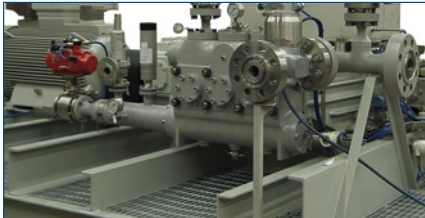
MAXIMUM PRESSURES		
Material	BAR G	PSI
Carbon Steel WCB	165	2,393
Carbon Steel Gr 90 60	341	4,946
316 Stainless Steel	147	2,132
Duplex 22% CR	225	3,263
Super Duplex 25% Crome	239	3,466
Inconel 625	250	3,626

\*Maximum absorbed power rating for the Ram 150 HCH Series is 135 kW – Please ensure specific application data is calculated to determine maximum absorbed power required.

# Dimensional Drawing



## Standard Supply Scope



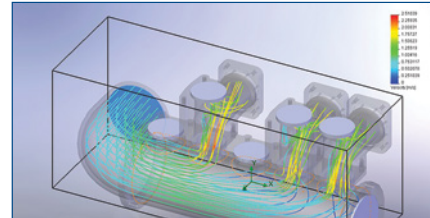
### Packaged Equipment

- Motors & Drives
- Diesel / Gas Engines
- Transmission
- Structural Fabrication
- Pulsation Management
- Valves & Filtration
- Instrumentation
- Electrical Control
- Lubrication Systems
- VSD / VFD Units
- PLC Control Systems
- Heating & Cooling
- Specialist Painting



### Inspection & Testing

- Material Certification 3.1, 3.2
- Hydrostatic Testing
- Performance Testing
- Mechanical Testing
- NDE - PMI, UT, DP, RT, MPI
- NPSH Testing
- Pulsation Analysis API674
- Mechanical Response Analysis
- ISO 9001 2008 Accredited
- ISO 14001 Accredited
- Supply to ABS, DNV, LR, KR
- Supply to NORSOK Standards
- NACE Compliance



### Project Services

- Dedicated Project Teams
- In House 3D Design
- FEA Analysis Verification
- Comprehensive Project Documentation
- Automated Document Tracking
- TPI Support Service
- Global Commissioning Service
- On Site Testing Verification
- Onshore / Offshore Engineering Support
- Aftersales & Support Network
- Global Representation
- Comprehensive Warranty Scheme
- Global Logistics Support

#### Ram Pumps Ltd.

Unit 14, Hazelwood Trading Estate, Worthing, West Sussex, BN14 8NP  
 Tel: +44 (0) 1903 206622 • Fax: +44 (0) 1903 205511 • [www.rampumps.co.uk](http://www.rampumps.co.uk) • Email: [sales@rampumps.co.uk](mailto:sales@rampumps.co.uk)

©2016 Ram Pumps Inc. All rights reserved. 16179 4/16