

# intMPE MPHHDSCP Series Centrifugal Pumps

Standard Chemical Process Pumps  
**ASME B73.1/ISO2858**



# intMPE MPHHDSCP Series Centrifugal Pumps

## STANDARD CHEMICAL PROCESS PUMPS

### GENERAL

intMPE Type MPHHDSCP Pumps are designed according to ASME B73.1.ISO 5199 Standards. These pumps are Horizontal Single Stage, Single Suction radial split centrifugal pumps.

The intMPE MPHHDSCP dimensions and performance is in conformity with ISO 2858. The size 150 - 400 pumps and up are proprietary. The indexes of efficiency and cavitation performance exceed that of IH pump types. Manufacturing is exchanged to produce a single pump series from these two types.

### APPLICATION

The intMPE MPHHDSCP pumps are widely used in the Chemical, Petrochemical, Refinery, Pulp & Paper and Sugar Industries. Food grade materials are also available.

### PERFORMANCE

- Size: DN: 32-300mm
- Capacity to: Q = 2000 m<sup>3</sup>/h
- Heads to: H = 160m
- Operating Pressure: P = 2.5Mpa
- Operating Temperature: T = 260 °C

### PUMPING MEDIUMS & MATERIALS

The intMPE MPHHDSCP pumps can handle clean liquids and liquids containing solids. Some of the common ASTM materials offered are; CD4MCU, 316SS, 316LSS, 304SS, 410SS, HASTALLOY Grades B-G, MONEL, ALLOY 20, DUCTILE IRON. Consult the factory for specific alloy requirements.

### MODEL SYMBOLS

50MPHHDSCP250

- 50 = Discharge of 50mm
- MP = Mineral Processing
- HHD = Horizontal Heavy Duty
- SC = Standard Chemical
- P = Pump
- 250 = Impeller Diameter in mm.

### PRODUCT FEATURES

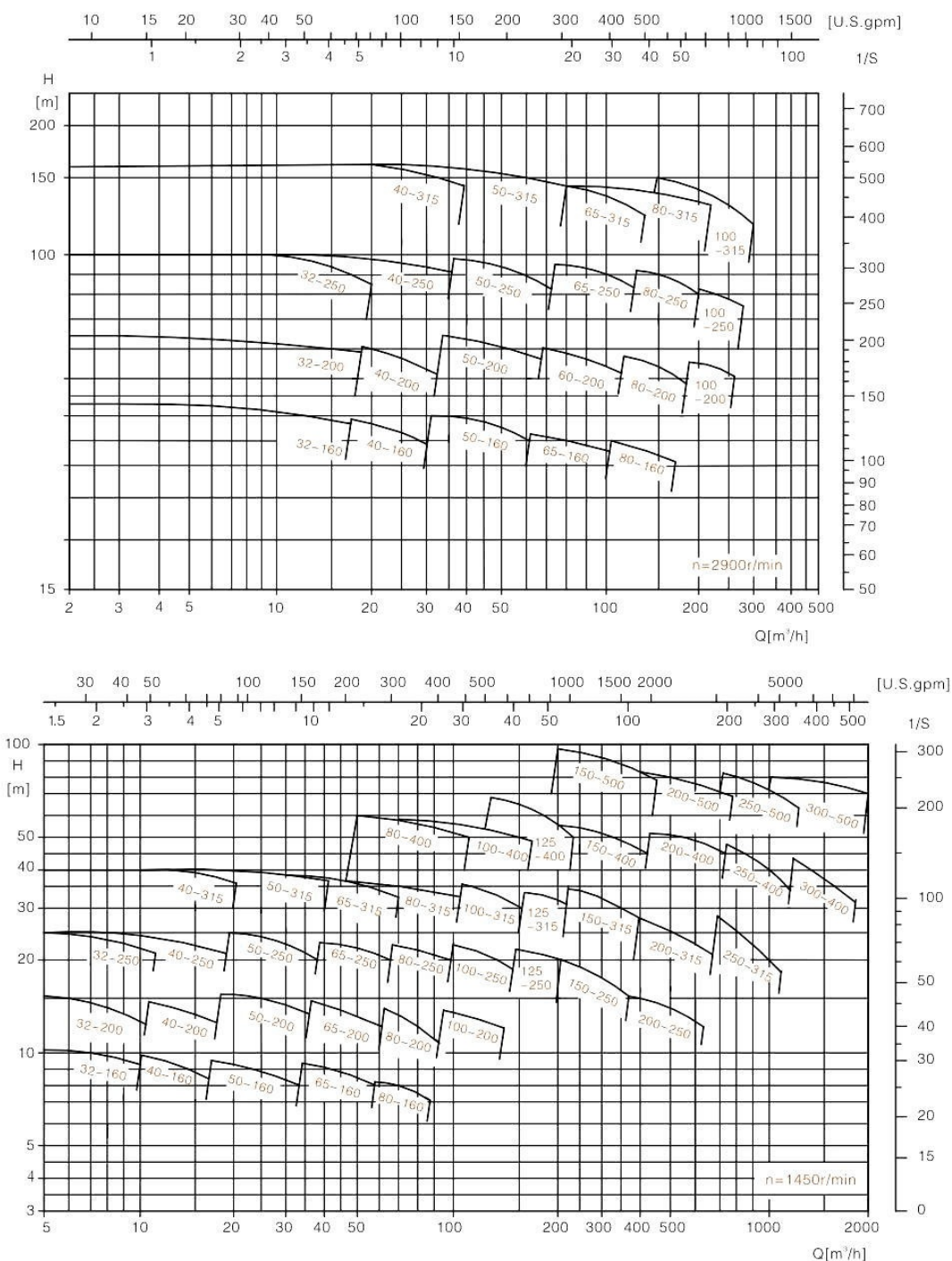
- **Hydraulic Design:** The axial force is balanced by back vanes or balancing bores at the impeller. On some sizes, the casing is designed as a double volute to compensate the radial forces.
- **Shaft Seal Design:** The shaft is sealed either by soft packing or by single or double mechanical seals with varying flush plans. The secondary impeller seal is custom designed and used when necessary.
- **Flange Grade:** The suction and discharge flanges are rated for the same pressure. PN2.5Mpa is a standard. They can also be designed PN1.6Mpa or 150 lb. raised face.
- **Structure Design:** The pumps are designed for back pullout and coupled to the driver with flexible couplings. The volute casing and the driver need not to be removed from the mounting baseplate to perform normal maintenance repairs.



**NOTE: Mechanical Seal, Apex type S1.1375.CB.SC.V.V.316 single cartridge 316ss Carbon vs SC, Viton are available on request with Cover FMS (flow modified standard)**

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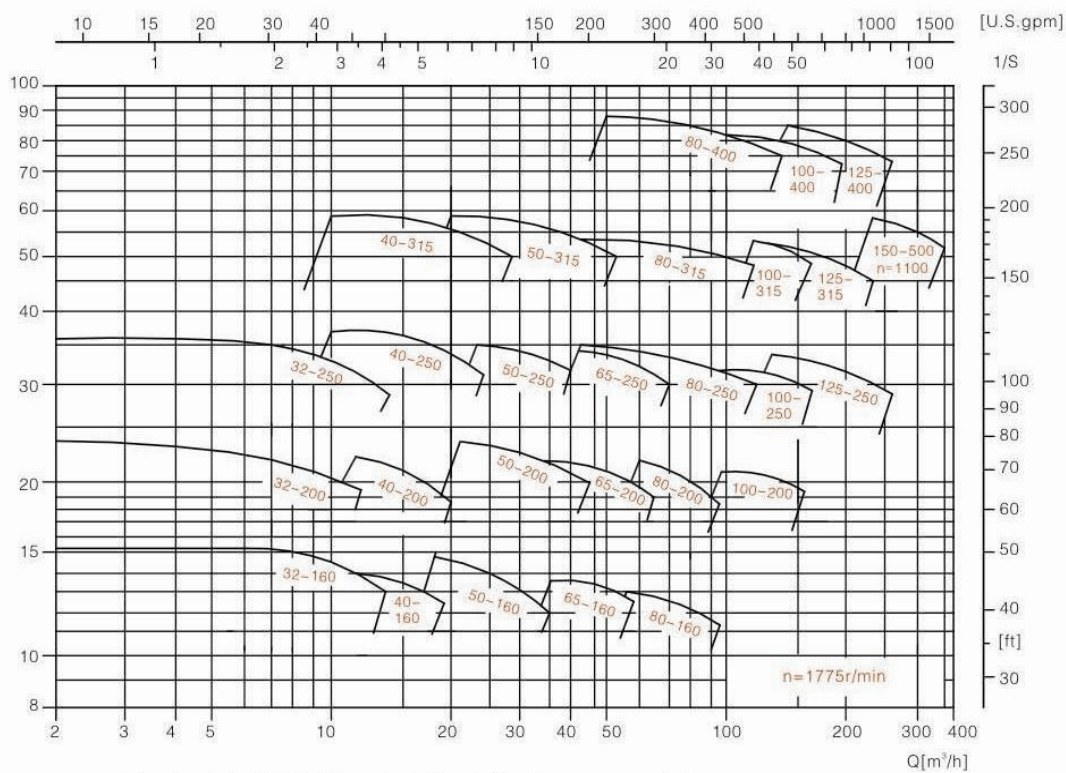
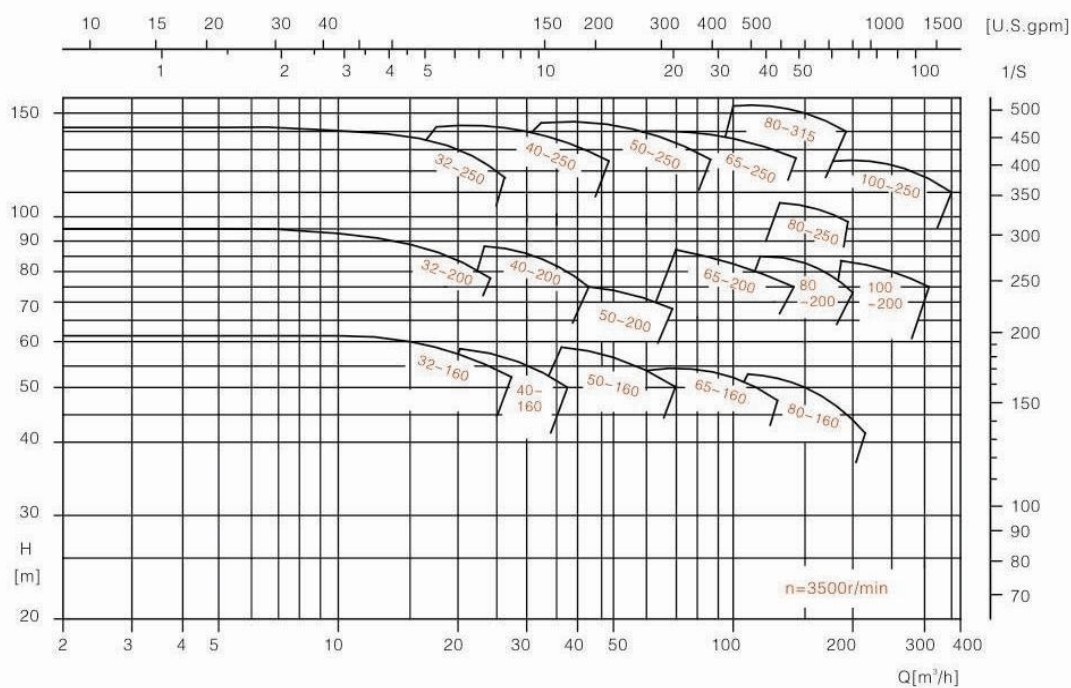
(50Hz) Performance Charts (50Hz)



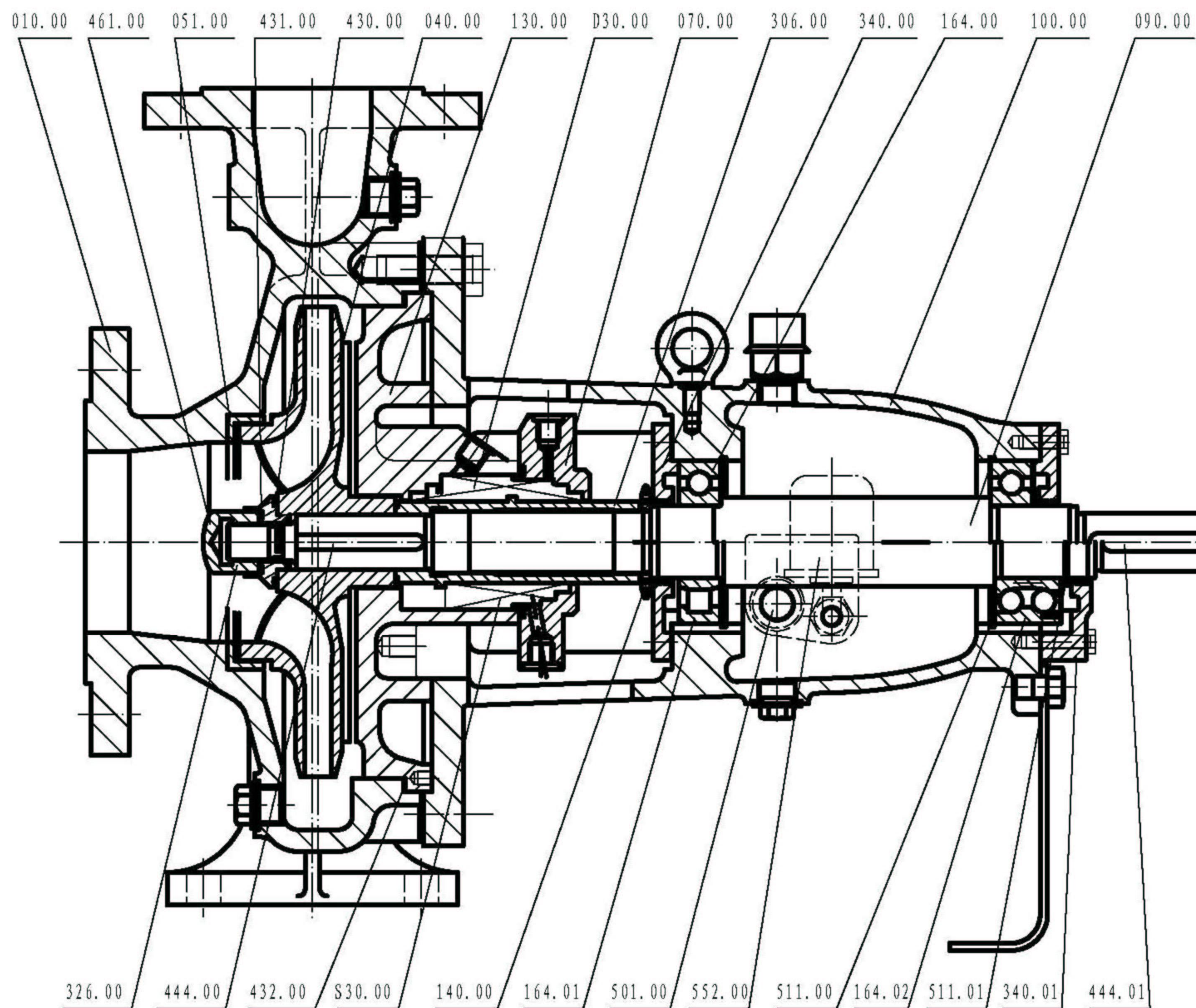
Contact intMPE for detailed Performance Curves

# intMPE MPHHDSCP Series Centrifugal Pumps

(60Hz) Performance Charts (60Hz)



Contact intMPE for detailed Performance Curves



|        |                        |              |        |
|--------|------------------------|--------------|--------|
| 326.00 | Collar disc            | CD4MCu       | 1      |
| 444.00 | Key                    | 45#          | 1      |
| 432.00 | Gasket                 |              | 1      |
| S30.00 | Single mechanical seal |              | (1set) |
| 140.00 | Deflector              | PTFE         | 1      |
| 164.01 | Antifriction bearing   |              | 1      |
| 501.00 | Sight glass            |              | 1      |
| 552.00 | Constant-level-oiler   |              | 1      |
| 511.00 | Circlip                | 65Mn         | 2      |
| 164.02 | Antifriction bearing   |              | 1      |
| 511.01 | Circlip                | 65Mn         | 1      |
| 340.01 | Bearing cover          | HT150        | 1      |
| 444.01 | Key                    | 45#          | 1      |
| 090.00 | Shaft                  | 3Cr13        | 1      |
| 100.00 | Bearing bracket        | HT150        | 1      |
| 164.00 | Antifriction bearing   |              | 2      |
| 340.00 | Bearing cover          | HT150        | 2      |
| 306.00 | Shaft sleeve           | CD4MCu       | 1      |
| 070.00 | Sealing cover          | CD4MCu       | 1      |
| D30.00 | Double mechanical seal |              | (1set) |
| 130.00 | Casing cover           | CD4MCu       | 1      |
| 040.00 | Impeller               |              | 1      |
| 430.00 | O-ring                 | NBR or Viton | 1      |
| 431.00 | O-ring                 |              | 1      |
| 051.00 | Casing cover ring      | PH50         | 1      |
| 461.00 | Impeller nut           | CD4MCu       | 1      |
| 010.00 | Volute casing          |              | 1      |
| No.    | Name                   | Material     | Q'ty   |

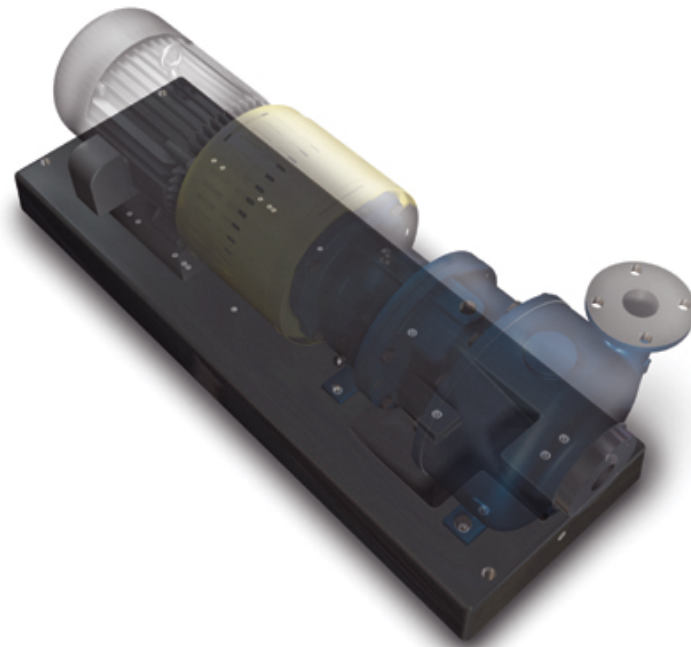
intMPE DESIGNED HORIZONTAL BACK PULLOUT ANSI B73.1M  
NEWMONT PROJECT ITEMS #4 & 8-9 & 11-19 PP-007 & 012, 020-021 & 025-026, 029-032  
AND PP# 054, 056, 057, 061, 050

|           |                                     |                                |  |
|-----------|-------------------------------------|--------------------------------|--|
| Ratifier  | MPHHDSCP Pumps<br>Sectional Drawing |                                |  |
| Corrector | Pump Character                      | Ball Bearing, Bracket uncooled |  |
| Designer  | Material No.                        | CD4MCu                         |  |
| Date      | Drawing No.                         | P-818 00 002 0                 |  |

# Polymer Concrete Baseplates

## Optional features

- ◆ Custom sizes
- ◆ Custom colors
- ◆ Hastelloy-C inserts
- ◆ Leveling screws
- ◆ Compatible grout
- ◆ Integrally molded grout holes



# Guards

## Features

- ◆ Economically priced
- ◆ Safety yellow
- ◆ Barrel type coupling guards will bolt directly to many common models of pumps including: Goulds, Durco, Summit, Peerless and others.

