

Submit \$50.00  
Renewal Fee



SECRETARY OF STATE  
Corporation Division  
Business Registry  
255 Capitol Street NE Ste 151  
Salem, OR 97310-1327  
Phone: (503) 986-2228  
Fax: (503) 378-4381

THIS SPACE FOR OFFICE USE ONLY

**FILED**

**FEB 8 2012**

**OREGON  
SECRETARY OF STATE**

**Registration Number:**  
T/S 14498

**TRADE AND SERVICE MARK APPLICATION FOR RENEWAL**  
**PLEASE TYPE OR PRINT LEGIBLY IN BLACK INK**

1. Correspondent's Mailing Address:

PACIFIC MACHINERY & TOOL STEEL CO  
3445 NW LUZON ST

PORTLAND

OR 97210-1694

2. Applicant's (owner) business address:

PACIFIC MACHINERY & TOOL STEEL CO  
SAME

OR

Renewal date:	3/15/2012
Original file date:	3/15/1982

**Trade or Service Mark:**

STANDARD CHROME PLATE ONLY "S-CPO"

P M & T S Co.

JAN 18 2012

RECEIVED

3. Attach a separate page with a drawing or photocopy of the mark as it is actually used. Any change in the mark requires a new registration.

**The mark is still in use in Oregon. To renew the trademark, complete this section.**

4. Class number(s) of goods or services: 

106	135						
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Please change or select new class number(s) from the list on the back of the form. One number set per box.

5. Applicant declares under penalties of perjury that this application is true, correct, and complete.

**Signature**

1/21/12

**Date**

6. Person to contact about this registration:

Terry Shum

**Name**

503-226-7656

**Daytime Phone Number**

Make checks payable to the Corporation Division. Submit to  
Business Registry, 255 Capitol St NE Ste 151, Salem, OR 973

Fees may be paid with a Visa or Mastercard. The card number  
on a separate sheet for your protection.



14498

T/S 14498

PACIFIC MACHINERY &amp; TOOL STEEL CO.

**CHROME PLATED BAR****AISI 1045/50, Stressproof® and Acralloy®**

PACIFIC Chrome Plated Bar is typically used for hydraulic cylinder rods. It is stocked in two basic conditions; CPO® (Chrome Plated Only) and IHCP® (Induction Hardened and Chrome Plated). The primary difference is that IHCP® bars are induction hardened to give a hard case on the surface for support to the chrome plating; this minimizes surface damage to the chrome from abrasion and/or impact.

Also, AISI 1045/50 CPO® and IHCP® are both available in standard and high strength properties. Thickness of chrome plating is designated as either Standard (0.0005" min.) or Heavy (0.001" min.).

CPO® bars are also stocked in Acralloy® and Stressproof® grades. Acralloy® offers the strength and toughness of a quenched and tempered alloy steel; Stressproof® gives high strength with free machining characteristics. Types and grades of PACIFIC Chrome Plated Bar are listed below:

S-CPO®: Standard Chrome Plated Only ..... AISI 1045/50 & Stressproof®

H-CPO®: Heavy Chrome Plated Only ..... AISI 1045/50 & Acralloy®

IHCP®: Induction Hardened & Chrome Plated ..... AISI 1045/50

S-CPO® HS: High Strength-SCPO ..... AISI 1045/50

IHCP® HS: High Strength-IHCP ..... AISI 1045/50

**CHEMICAL COMPOSITION: Heat Analysis—ranges and limits, %**

Grade	C	Mn	P	S	Cr	Mo
AISI 1045/50	.43/.55	.60/.90	.040 max	.050 max	—	—
Stressproof®	.40/.48	1.35/1.65	.040 max	.24/.33	—	—
Acralloy®	.38/.45	.75/1.00	.035 max	.040 max	.80/1.00	.15/.25

**TYPICAL PROPERTIES: Approximate—not for specification**

Grade	Tensile, psi	Yield, psi	Elong.	Hardness	Mach.
* AISI 1045/50	90,000	75,000	10%	179HB	56%
** AISI 1045/50 HS	115,000	100,000	9%	235HB	56%
** Stressproof®	115,000	100,000	8%	241HB	83%
Acralloy®	120,000	100,000	20%	255HB	55%

\* Cold drawn properties apply through 4½" diameter; larger diameters have hot rolled properties, i.e., 50,000 psi approximate yield strength.

\*\* ASTM A311, Class B

**CHROME PLATING PROPERTIES: CPO® and IHCP®**

	Thickness	Hardness	Surface Finish
Standard	.0005" min	69HRC min	16RMS max
Heavy	.001" min	69HRC min	16RMS max

**INDUCTION HARDENED PROPERTIES: IHCP®**

Surface Hardness	Effective Case Depth (to 50HRC)
50HRC min	.050" min

**TOLERANCES:** In decimals of an inch — provide for undersize variation only †

Diameter	Tolerance
to 1½"	.001"
1½" to 2½"	.0015"
2½" thru 3"	.002"
over 3" thru 4"	.003"
over 4"	.005"

† H-CPO® tolerances can be oversize to the nominal diameter. Ask your PACIFIC representative on specific items

**REMEMBER PACIFIC 17-4PH FOR HIGH STRENGTH STAINLESS CYLINDER RODS — SEE PAGE B-21**