# INDEX

## INCH DURA PUNCH® PRODUCTS
- XIS_Solid with standard point .................................................. 5
- XIC_Ejector with standard point .................................................. 6
- XI_B Blanks ............................................................................ 7
- XIPX Solid reduced shank ......................................................... 8
- XIYX Ejector reduced shank ...................................................... 8

## RETAINERS
- XIRN — Round Dura Punch Retainers ........................................ 13
- XIRO — Shaped Dura Punch Retainers ...................................... 13

## METRIC DURA PUNCH® PRODUCTS
- XMS_Solid with standard point .................................................... 9
- XMC_Ejector with standard point ................................................ 10
- XM_B Blanks ............................................................................ 11
- XMSX Solid reduced shank ....................................................... 12
- XMCX Ejector reduced shank .................................................... 12

## RETAINERS
- XMRN — Round Dura Punch Retainers ........................................ 14
- XMRO — Shaped Dura Punch Retainers ...................................... 14
Moeller’s “Purchase With Confidence” Guarantee!

• Customer satisfaction is Moeller’s ultimate goal.
• Moeller was the first domestic punch manufacturer to receive its ISO certification. Moeller products are manufactured to NAPMA, NAAMS or other recognized industrial standards and are 100% interchangeable with all competing brands.
• Moeller uses only the highest commercially available grades of high speed and tool steels. The products are heat treated to exacting specifications then processed on some of the best equipment in the industry.
• Moeller products are warranted to meet or exceed the performance of like products from competing brands. If a customer is unsatisfied, Moeller will replace or allow the customer to return the product for full credit.

Over Shipments/Under Shipments:
Because of normal part losses, due to machining set-up, Moeller requires that an over or undershipment of ± 10% be allowed on quantities of 13 pieces or more.

Partial Shipments:
Standard line items are batched and shipped according to the latest line item due. Specials are shipped according to line item due dates.
Note: Moeller will accommodate any partial shipment as requested by the customer.

Returns:
1. Catalog items that are custom ground to customer specification are often non reusable. Moeller will allow a courtesy 15% credit on these items.
2. Unused, off the shelf items such as, punch blanks and standard retainers can be returned for a 15% restocking charge. The items must be in resellable condition.
3. Special make to print items are not returnable.

Method of Shipment:
Moeller ships UPS or Federal Express whenever possible, unless weight requirements dictate truck delivery, or as specifically requested by the customer.

Cancellation:
If labor or material has been applied to a canceled job, a prorated charge will be billed.

Prices/Standards:
See current price supplement in effect.

Prices/Specials:
Per factory quotation good for 90 days or as specified.

Terms:
Net 30 days, F.O.B. our plant, 11/2% per month late payment charge. U.S. dollars.

Moeller’s “Customer Service Stock” Program:
Moeller is pleased to offer an exclusive Service Stock Program to select customers. The “Customer Service Stock” program offers many benefits to our valued customers, including product cost reduction, immediate “on hand” availability, and reduced customer inventory costs. Moeller will manufacture your annual or semi-annual requirements for Pierce Tooling and Die Components and make them available for immediate shipment. The parts are billed only as shipped. A written purchase order is required with inventory set-up and parts must be released in the subsequent year. Please contact your Moeller Sales Representative for more details.
DELIVERY DATE POLICY/EXPEDITED SERVICES

STANDARD DELIVERY

SAME DAY/1 DAY:
- Punch and Button Blanks, Standard Retainers and All Other Stocked Products

3 WORKING DAYS:
- Standard In-Range Punches and Die Buttons
- Includes one Standard Alteration
- Quantities of 23 Pieces or Less

5 WORKING DAYS:
- Nose Large Punches & Buttons over 1.500 Diameters
- Includes one Standard Alteration
- Quantities of 7 Pieces or Less

10 WORKING DAYS:
- Universal Shaped Punches and Die Buttons, Quill Punches & Closed End Strippers

PERFORMANCE ENHANCER:
- TIN, TICN, MOST, CDF
  NOTE: 3-10 Additional Work Days to the Standard Delivery Date

ORDERS MUST BE RECEIVED BEFORE 11:00AM EST (OR AS APPROVED BY A CUSTOMER SERVICE REPRESENTATIVE) TO BE CONSIDERED A WORK DAY.

QUANTITIES LARGER THAN 23 PIECES MAY REQUIRE ADDITIONAL LEAD TIME. CUSTOMER SERVICE REPRESENTATIVE MUST CONSULT FACTORY.

N.D.S. NEXT DAY SERVICE
Standard Products Received by 5:30 p.m. EST Will Ship Next Day

QUALIFYING PRODUCTS:
- Round Piercing Products (excluding Ultra Life)

REQUIRED SPECIFICATIONS:
1. N.D.S. Items MUST be on an Independent Order (i.e. they must be separate from other delivery items)
2. Service Limited to Quantities of 1-20 Pieces
3. MUST be within Standard Catalog Range
4. Customer MUST Specify Next Day Service
5. Customer SHOULD Specify Method of Shipment (e.g. UPS, UPS Next Day Air, Pick Up, etc.)

COST:
- No Additional Charge

REQUIRED SPECIFICATIONS MUST BE CLEARLY STATED ON INDEPENDENT PURCHASE ORDER(S) TO GUARANTEE NEXT DAY SERVICE.

S.D.S. SAME DAY SERVICE

LEAD TIME:
- Orders MUST be received before 11:00 a.m. EST or as approved by a Customer Service Representative

QUALIFYING PRODUCTS:
1. Catalog Standard Products with Only One Standard Alteration
2. Round Products - 20 Piece Maximum
   Shaped Products - 10 Piece Maximum
3. Coating Excluded
4. Excluded Products:
   - Nose Large Punches, Large Buttons, Urethane, Close Space or Quill Punches
   - Some Descriptive Shaped Products

COST:
- List Price + 50% Net
- Minimum Order = $50.00

CUSTOMER SERVICE REPRESENTATIVE MUST RECEIVE APPROVAL FROM EITHER PRODUCTION CONTROL MANAGER OR PLANT SUPERINTENDENT.

E.D.S. EXPEDITED DELIVERY SERVICE
Products Shipped Earlier Than Standard Delivery

LEAD TIME:
- As Negotiated with a Customer Service Representative

QUALIFYING PRODUCTS:
- All Standard Catalog Items

COST:
- List Price + 25% Net
- Minimum Order = $25.00

CUSTOMER SERVICE REPRESENTATIVE MUST RECEIVE APPROVAL FROM EITHER PRODUCTION CONTROL MANAGER OR PLANT SUPERINTENDENT.
CUST OM "SBR", STANDARD ALTERATIONS OR UNIVERSAL SHAPE CODE

CATALOG NOMENCLATURE

FIRST ALPHA CHARACTER

THIRD ALPHA CHARACTER

OVERALL LENGTH “L”

POINT SIZES

CUSTOM "SBR", STANDARD ALTERATIONS OR UNIVERSAL SHAPE CODE

ISO 75 - 350 C P=___ W=___,___

EXTENDED PRODUCT LINE PREFIX “X”

SECOND ALPHA CHARACTER

BODY OR SHANK DIAMETER “D”

STANDARD OR B, C, POINT LENGTH

FIRST CHARACTERS

SECOND CHARACTER

Basic Body Type
- C Shoulder Punch Basic/Ejector
- P Inch Solid Reduced Shank
- R Retainers
- S Shoulder Punch Basic/Solid
- Y Inch Ejector Reduced Shank

THIRD CHARACTER

Point Shape
- B Blank - Punch
- C Circular
- D Dee
- F Flatted Round
- H Hexagon
- K Key Flat
- O Oblong
- R Rectangle
- S Square
- U Universal Shapes
- X Reduced Body

Retainers
- N Shoulder Style Round
- O Shoulder Style Shaped

FIRST CHARACTERS

MEASUREMENT SYSTEM
- I = Inch
- M = Metric
INCH-SHOULDER STYLE

SOLID

ROUND
XISC

OBLONG
XISO

90°

SQUARE
XISS

RECTANGLE
XISR

180°

HEXAGON
XISH

KEYFLAT
XISK

FLATTED ROUND
XISF

DEE
XISD

270°

VIEWS ARE SHOWN LOOKING THROUGH THE SHANK BUT DRAWN WITH SOLID LINES FOR CLARITY.

<table>
<thead>
<tr>
<th>CATALOG TYPE</th>
<th>SHANK D</th>
<th>SHAPE</th>
<th>OVERALL LENGTH &quot;L&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RANGE P</td>
<td>MIN W</td>
<td>2.50</td>
</tr>
<tr>
<td>XIS_37</td>
<td>.3750</td>
<td>.158- .3749</td>
<td>.158</td>
</tr>
<tr>
<td>XIS_43</td>
<td>.4375</td>
<td>.187- .4374</td>
<td>.187</td>
</tr>
<tr>
<td>XIS_50</td>
<td>.5000</td>
<td>.250- .5000</td>
<td>.187</td>
</tr>
<tr>
<td>XIS_62</td>
<td>.6250</td>
<td>.375- .6249</td>
<td>.250</td>
</tr>
<tr>
<td>XIS_75</td>
<td>.7500</td>
<td>.500- .7500</td>
<td>.312</td>
</tr>
<tr>
<td>XIS_87</td>
<td>.8750</td>
<td>.562- .8749</td>
<td>.312</td>
</tr>
<tr>
<td>XIS_100</td>
<td>1.0000</td>
<td>.687- .9999</td>
<td>.375</td>
</tr>
</tbody>
</table>

Material
Steel: CPM M4 HRC 60-62
Heads HRC 40-55

Standard Point Tolerance
Round P ±.0005
Shape P, W ±.0005

ORDER EXAMPLE:
(Reference page 4)
POINT P (OR P&W) ALTERATION
SPECIFY: QTY: TYPE "D" "L" LENGTH DIMENSIONS CODE
EXAMPLE: 6 XISC 50 5.00 1.00 .435 F1
EXAMPLE: 6 XISO 87 3.50 .75 .750 x .625 F1 @ 90
Note: When ordering, standard quantity breaks are: 1, 2-3, 4-11, 12-23, 24-49, 50-99

STANDARD FLAT LOCATION IS AT 0° AS SHOWN.
AVAILABLE AT 90°, 180°, 270°, FOR SAME ALTERATION PRICE.
INCH-SHOULDER STYLE

EJECTOR

ROUND XICC

OBLONG XICO

SQUARE XICS

RECTANGLE XICR

180° HEXAGON XICH

KEYFLAT XICK

FLATTED ROUND XICF

DEE XICD

270°

VIEWS ARE SHOWN LOOKING THROUGH THE SHANK BUT DRAWN WITH SOLID LINES FOR CLARITY.

FOR STANDARD ALTERATIONS SEE MASTER CATALOG

<table>
<thead>
<tr>
<th>CATLLOG TYPE</th>
<th>SHANK</th>
<th>ROUND</th>
<th>SHAPE</th>
<th>OVERALL LENGTH “L”</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>RANGE</td>
<td>MIN</td>
<td>2.50</td>
</tr>
<tr>
<td>XIC_37</td>
<td>.3750</td>
<td>.187</td>
<td>.187</td>
<td>.3750</td>
</tr>
<tr>
<td>XIC_43</td>
<td>.4375</td>
<td>.187</td>
<td>.187</td>
<td>.4375</td>
</tr>
<tr>
<td>XIC_50</td>
<td>.5000</td>
<td>.250</td>
<td>.187</td>
<td>.5000</td>
</tr>
<tr>
<td>XIC_62</td>
<td>.6250</td>
<td>.375</td>
<td>.250</td>
<td>.6250</td>
</tr>
<tr>
<td>XIC_75</td>
<td>.7500</td>
<td>.500</td>
<td>.312</td>
<td>.7500</td>
</tr>
<tr>
<td>XIC_87</td>
<td>.8750</td>
<td>.625</td>
<td>.312</td>
<td>.8750</td>
</tr>
<tr>
<td>XIC_100</td>
<td>1.0000</td>
<td>.687</td>
<td>.375</td>
<td>1.0000</td>
</tr>
</tbody>
</table>

Material

Steel: CPM M4 HRC 60-62
Heads HRC 40-55

Standard Point Tolerance

Round P ± .0005
Shape P, W ± .0005

ORDER EXAMPLE:

(Reference page 6)

POINT P (OR PAIR) ALTERATION

SPECIFY: QTY: TYPE “D” “L” LENGTH DIMENSIONS CODE

EXAMPLE: 6 XICC 50 .500 .50 .75 .0005 F1
EXAMPLE: 6 XICO 87 .375 .75 .750 x .625 F1 @ 90

Note: When ordering, standard quantity breaks are: 1, 2-3, 4-11, 12-23, 24-49, 50-99

STANDARD FLAT LOCATION IS AT 0° AS SHOWN.
AVAILABLE AT 90°, 180°, 270°, FOR SAME ALTERATION PRICE.
INCH-SHOULDER PUNCH BLANKS

BASIC/SOLID/EJECTOR

---

**XISB**

**XICB**

---

Material

Steel: CPM M4 HRC 60-62

Heads HRC 40-55

---

FOR STANDARD ALTERATIONS SEE MASTER CATALOG

---

<table>
<thead>
<tr>
<th>CATALOG NUMBER SOLID</th>
<th>SHANK DIA D</th>
<th>OVERALL LENGTH “L”</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.50</td>
<td>3.00</td>
</tr>
<tr>
<td>XISB 37</td>
<td>.3750</td>
<td>X</td>
</tr>
<tr>
<td>XISB 43</td>
<td>.4375</td>
<td>X</td>
</tr>
<tr>
<td>XISB 50</td>
<td>.5000</td>
<td>X</td>
</tr>
<tr>
<td>XISB 62</td>
<td>.6250</td>
<td>X</td>
</tr>
<tr>
<td>XISB 75</td>
<td>.7500</td>
<td>X</td>
</tr>
<tr>
<td>XISB 87</td>
<td>.8750</td>
<td>X</td>
</tr>
<tr>
<td>XISB 100</td>
<td>1.0000</td>
<td>X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CATALOG NUMBER EJECTOR</th>
<th>SHANK DIA D</th>
<th>OVERALL LENGTH “L”</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.50</td>
<td>3.00</td>
</tr>
<tr>
<td>XICB 37</td>
<td>.3750</td>
<td>X</td>
</tr>
<tr>
<td>XICB 43</td>
<td>.4375</td>
<td>X</td>
</tr>
<tr>
<td>XICB 50</td>
<td>.5000</td>
<td>X</td>
</tr>
<tr>
<td>XICB 62</td>
<td>.6250</td>
<td>X</td>
</tr>
<tr>
<td>XICB 75</td>
<td>.7500</td>
<td>X</td>
</tr>
<tr>
<td>XICB 87</td>
<td>.8750</td>
<td>X</td>
</tr>
<tr>
<td>XICB 100</td>
<td>1.0000</td>
<td>X</td>
</tr>
</tbody>
</table>

ORDER EXAMPLE:

SPECIFY: QTY: TYPE “D” “L”

EXAMPLE: 6 XISB 43 4.00

EXAMPLE: 6 XICB 62 3.50

Note: When ordering, standard quantity breaks are:
1, 2-3, 4-11, 12-23, 24-49, 50-89
INCH-REDUCED SHANK PUNCHES

SOLID/EJECTOR

XIPX

XIYX

Material
Steel: CPM M4 HRC 60-62
Heads: HRC 40-55

FOR STANDARD ALTERATIONS SEE MASTER CATALOG

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>SHANK DIA P RANGE</th>
<th>HEAD DIM H</th>
<th>OVERALL LENGTH &quot;L&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>2.50 3.00 3.25 3.50 3.75 4.00 4.50 5.00</td>
</tr>
<tr>
<td>XIPX 37</td>
<td>.3126-.3750</td>
<td>0.562</td>
<td>X X X X X X X X X</td>
</tr>
<tr>
<td>XIPX 43</td>
<td>.3751-.4375</td>
<td>0.625</td>
<td>X X X X X X X X X</td>
</tr>
<tr>
<td>XIPX 50</td>
<td>.4376-.5000</td>
<td>0.687</td>
<td>X X X X X X X X X</td>
</tr>
<tr>
<td>XIPX 62</td>
<td>.5001-.6250</td>
<td>0.812</td>
<td>X X X X X X X X X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>SHANK DIA P RANGE</th>
<th>HEAD DIM H</th>
<th>OVERALL LENGTH &quot;L&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>2.50 3.00 3.25 3.50 3.75 4.00 4.50 5.00</td>
</tr>
<tr>
<td>XIYX 37</td>
<td>.3126-.3750</td>
<td>0.562</td>
<td>X X X X X X X X X</td>
</tr>
<tr>
<td>XIYX 43</td>
<td>.3751-.4375</td>
<td>0.625</td>
<td>X X X X X X X X X</td>
</tr>
<tr>
<td>XIYX 50</td>
<td>.4376-.5000</td>
<td>0.687</td>
<td>X X X X X X X X X</td>
</tr>
<tr>
<td>XIYX 62</td>
<td>.5001-.6250</td>
<td>0.812</td>
<td>X X X X X X X X X</td>
</tr>
</tbody>
</table>

ORDER EXAMPLE:
(Reference page 4)
SPECIFY: QTY: TYPE "L" "P"
EXAMPLE: 6 XIPX 43 4.50 .385
EXAMPLE: 6 XIYX 62 3.00 .5625

Note: When ordering, standard quantity breaks are:
1, 2-3, 4-11, 12-23, 24-49, 50-99
METRIC-SHOULDER PUNCHES

SOLID

VIEWs ARE SHOWN LOOKING THROUGH THE SHANK BUT DRAWN WITH SOLID LINES FOR CLARITY.

FOR STANDARD ALTERATIONS SEE MASTER CATALOG

STANDARD FLAT LOCATION IS AT 0° AS SHOWN.
AVAILABLE AT 90°, 180°, 270°, FOR SAME ALTERATION PRICE.

<table>
<thead>
<tr>
<th>CATALOG TYPE</th>
<th>SHANK D</th>
<th>POINT LENGTH “SBR”</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>STD</td>
<td>ALTERNATE</td>
</tr>
<tr>
<td>XMS_08</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>XMS_10</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>XMS_13</td>
<td>13</td>
<td>19</td>
</tr>
<tr>
<td>XMS_16</td>
<td>16</td>
<td>19</td>
</tr>
<tr>
<td>XMS_20</td>
<td>20</td>
<td>19</td>
</tr>
<tr>
<td>XMS_25</td>
<td>25</td>
<td>19</td>
</tr>
<tr>
<td>XMS_32</td>
<td>32</td>
<td>19</td>
</tr>
</tbody>
</table>

L=50 SBR MAX=13
L=60 SBR MAX=19
L=63 SBR MAX=25

ORDER EXAMPLE:
(Reference page 4)

SPECIFY: QTY: TYPE “D” “L” POINT LENGTH FOR P&W ALTERATION DIMENSIONS CODE
EXAMPLE: 6 XMSC 13 90 13 10.0 FT 1
EXAMPLE: 6 XMSS 16 80 STD 14.0 X 0.0 F1 @ 90

Note: When ordering, standard quantity breaks are: 1, 2, 3, 4, 5, 10, 25, 50, 100

Material
Steel: CPM M4 HRC 60-62
Heads HRC 40-55

Standard Point Tolerance
Round P + .01
Shape P, W ± .01

Material
Steel: CPM M4 HRC 60-62
Heads HRC 40-55

Standard Point Tolerance
Round P + .01
Shape P, W ± .01

ORDER EXAMPLE:
(Reference page 4)

SPECIFY: QTY: TYPE “D” “L” POINT LENGTH FOR P&W ALTERATION DIMENSIONS CODE
EXAMPLE: 6 XMSC 13 90 13 10.0 FT 1
EXAMPLE: 6 XMSS 16 80 STD 14.0 X 0.0 F1 @ 90

Note: When ordering, standard quantity breaks are: 1, 2, 3, 4, 5, 10, 25, 50, 100

Material
Steel: CPM M4 HRC 60-62
Heads HRC 40-55

Standard Point Tolerance
Round P + .01
Shape P, W ± .01
**METRIC-SHOULDER PUNCHES**

**EJECTOR**

**VIEW EXAMPLES**

- **ROUND**
  - XMCC
  - XMCO
- **OBLONG**
  - XMCH
  - XMCK
- **SQUARE**
  - XMCS
- **RECTANGLE**
  - XMCR
- **HEXAGON**
  - XMCH
- **KEYFLAT**
  - XMCK
- **FLATTED ROUND**
  - XMCF
- **DEE**
  - XMCD

**SHANK**

- **CATALOG TYPE**: XMCC, XMCO, XMCS, XMCR, XMCH, XMCK, XMCF, XMCD
- **ROUND**
  - XMCC
  - XMCO
- **OBLONG**
  - XMCH
  - XMCK
- **SQUARE**
  - XMCS
- **RECTANGLE**
  - XMCR
- **HEXAGON**
  - XMCH
- **KEYFLAT**
  - XMCK
- **FLATTED ROUND**
  - XMCF
- **DEE**
  - XMCD

**DIMENSIONS**

- **OVERALL LENGTH “L”**
  - **RANGE**: 4.00 - 7.99
  - **MIN**: 4.00
  - **MAX**: 8.00
  - **G/P**: 70, 80, 90, 100

- **Material**
  - **Steel**: CPM M4 HRC 60-62
  - **Heads**: HRC 40-55

- **Point Tolerance**
  - **Round P**: +0.01
  - **Shape P, W**: +0.01

**ORDER EXAMPLE**

- **POINT P/PR**: ALTERATION CODE
  - **EXAMPLE**: 6 XMCC 13 90 15.0 F1

**STANDARD FLAT LOCATION**

- **LOCATION IS AT 0° AS SHOWN**
- **AVAILABLE AT 90°, 180°, 270°**
- **FOR SAME ALTERATION PRICE**
BASIC/SOLID/EJECTOR

**Material**
Steel: CPM M4 HRC 60-62
Heads HRC 40-55

**Order Example:**
(Reference page 4)
**Specify:**
**QTY:**
**Type:** “D” “L”

**Example:**
6 XMSB 8 100
6 XMCB 16 90

Note: When ordering, standard quantity breaks are:
1, 2-3, 4-11, 12-23, 24-49, 50-99

---

**Catalog Number**
**Shank Dia:**
**Overall Length “L”**

<table>
<thead>
<tr>
<th>CATALOG NUMBER SOLID</th>
<th>SHANK DIA D</th>
<th>OVERALL LENGTH “L”</th>
</tr>
</thead>
<tbody>
<tr>
<td>XMSB 08</td>
<td>08</td>
<td>X X X X</td>
</tr>
<tr>
<td>XMSB 10</td>
<td>10</td>
<td>X X X X</td>
</tr>
<tr>
<td>XMSB 13</td>
<td>13</td>
<td>X X X X</td>
</tr>
<tr>
<td>XMSB 16</td>
<td>16</td>
<td>X X X X</td>
</tr>
<tr>
<td>XMSB 20</td>
<td>20</td>
<td>X X X X</td>
</tr>
<tr>
<td>XMSB 25</td>
<td>25</td>
<td>X X X X</td>
</tr>
<tr>
<td>XMSB 32</td>
<td>32</td>
<td>X X X X</td>
</tr>
</tbody>
</table>

---

**Catalog Number**
**Shank Dia:**
**Overall Length “L”**
**Ejector Size**

<table>
<thead>
<tr>
<th>CATALOG NUMBER EJECTOR</th>
<th>SHANK DIA D</th>
<th>OVERALL LENGTH “L”</th>
<th>EJECTOR SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>XMCB 08</td>
<td>08</td>
<td>X X X X</td>
<td>MAE 4</td>
</tr>
<tr>
<td>XMCB 10</td>
<td>10</td>
<td>X X X X</td>
<td>MAE 5</td>
</tr>
<tr>
<td>XMCB 13</td>
<td>13</td>
<td>X X X X</td>
<td>MAE 5</td>
</tr>
<tr>
<td>XMCB 16</td>
<td>16</td>
<td>X X X X</td>
<td>MAE 6</td>
</tr>
<tr>
<td>XMCB 20</td>
<td>20</td>
<td>X X X X</td>
<td>MAE 6</td>
</tr>
<tr>
<td>XMCB 25</td>
<td>25</td>
<td>X X X X</td>
<td>MAE 6</td>
</tr>
<tr>
<td>XMCB 32</td>
<td>32</td>
<td>X X X X</td>
<td>MAE 6</td>
</tr>
</tbody>
</table>
**METRIC-REDUCED SHANK PUNCHES**

**SOLID/EJECTOR**

**XMSX**

**XMCX**

**Material**

Steel: CPM M4 HRC 60-62
Heads HRC 40-55

**FOR STANDARD ALTERATIONS SEE MASTER CATALOG**

**ORDER EXAMPLE:**

(Reference page 4)

SPECIFY: QTY: TYPE “L” “P”

EXAMPLE: 6 XMSX 08 100 7.50
EXAMPLE: 6 XMCX 16 90 14.30

Note: When ordering, standard quantity breaks are:
1, 2-3, 4-11, 12-23, 24-49, 50-99
TRUE SET

XIRN STYLE FOR ROUND PUNCHES

| PART NUMBER | D   | d1  | L    | W    | R   | H   | J    | K    | S   | G   | E    | SCREW SIZE | TAPPED HOLE |
|-------------|-----|-----|------|------|-----|-----|------|------|-----|-----|------|------------|-------------|-------------|
| XIRN-37     | .375| .59 | 1.75 | 1.72 | .38 | .75 | .2953| .3543| .47 | .438| 1.060 | 5/16-18     | 3/8-16      |
| XIRN-50     | .500| .72 | 2.00 | 1.97 | .50 | .75 | .2559| .4724| .60 | .563| 1.180 | 5/16-18     | 3/8-16      |
| XIRN-62     | .625| .84 | 2.12 | 2.09 | .56 | .75 | .2362| .5315| .66 | .625| 1.25  | 5/16-18     | 3/8-16      |
| XIRN-75     | .750| .97 | 2.37 | 2.34 | .69 | .75 | .1968| .6496| .79 | .688| 1.320 | 5/16-18     | 3/8-16      |
| XIRN-87     | .875| 1.09| 2.50 | 2.47 | .75 | .75 | .1970| .7284| .85 | .688| 1.400 | 5/16-18     | 3/8-16      |
| XIRN-100    | 1.00| 1.22| 2.75 | 2.72 | .88 | .938| .2756| .8661| .97 | .781| 1.600 | 1/2-13      | 5/8-11      |

XIRO STYLE FOR SHAPED PUNCHES

| PART NUMBER | D   | R1  | L    | W    | R   | H   | J    | K    | S   | G   | E    | SCREW SIZE | TAPPED HOLE |
|-------------|-----|-----|------|------|-----|-----|------|------|-----|-----|------|------------|-------------|-------------|
| XIRO-37     | .375| .296| 1.75 | 1.72 | .38 | .75 | .2953| .3543| .47 | .438| 1.060 | 5/16-18     | 3/8-16      |
| XIRO-50     | .500| .359| 2.00 | 1.97 | .50 | .75 | .2559| .4724| .60 | .563| 1.180 | 5/16-18     | 3/8-16      |
| XIRO-62     | .625| .422| 2.12 | 2.09 | .56 | .75 | .2362| .5315| .66 | .625| 1.25  | 5/16-18     | 3/8-16      |
| XIRO-75     | .750| .484| 2.37 | 2.34 | .69 | .75 | .1968| .6496| .79 | .688| 1.320 | 5/16-18     | 3/8-16      |
| XIRO-87     | .875| .546| 2.50 | 2.47 | .75 | .75 | .1970| .7284| .85 | .688| 1.400 | 5/16-18     | 3/8-16      |
| XIRO-100    | 1.00| .609| 2.75 | 2.72 | .88 | .938| .2756| .8661| .97 | .781| 1.600 | 1/2-13      | 5/8-11      |
### TRUE SET

**XMRON STYLE FOR ROUND PUNCHES**

![Diagram of XMRON Style for Round Punches]

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>D</th>
<th>d1</th>
<th>L</th>
<th>W</th>
<th>R</th>
<th>H</th>
<th>J</th>
<th>K</th>
<th>S</th>
<th>G</th>
<th>E</th>
<th>SCREW SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>XMRON-10</td>
<td>10.00</td>
<td>15.5</td>
<td>44.5</td>
<td>43.7</td>
<td>9.5</td>
<td>19.0</td>
<td>7.5</td>
<td>9.0</td>
<td>12.0</td>
<td>11.1</td>
<td>26.925</td>
<td>M8</td>
</tr>
<tr>
<td>XMRON-13</td>
<td>13.00</td>
<td>18.5</td>
<td>50.8</td>
<td>50.0</td>
<td>12.7</td>
<td>19.0</td>
<td>6.5</td>
<td>12.0</td>
<td>15.2</td>
<td>14.3</td>
<td>29.970</td>
<td>M8</td>
</tr>
<tr>
<td>XMRON-16</td>
<td>16.00</td>
<td>21.5</td>
<td>54.0</td>
<td>53.2</td>
<td>14.3</td>
<td>19.0</td>
<td>6.0</td>
<td>13.5</td>
<td>16.8</td>
<td>15.9</td>
<td>31.750</td>
<td>M8</td>
</tr>
<tr>
<td>XMRON-20</td>
<td>20.00</td>
<td>25.5</td>
<td>60.3</td>
<td>59.5</td>
<td>17.5</td>
<td>19.0</td>
<td>5.0</td>
<td>16.5</td>
<td>20.0</td>
<td>17.5</td>
<td>33.530</td>
<td>M10</td>
</tr>
<tr>
<td>XMRON-25</td>
<td>25.00</td>
<td>30.5</td>
<td>69.9</td>
<td>69.1</td>
<td>22.2</td>
<td>23.8</td>
<td>7.0</td>
<td>22.0</td>
<td>24.7</td>
<td>19.8</td>
<td>40.640</td>
<td>M12</td>
</tr>
</tbody>
</table>

### XMRO STYLE FOR SHAPED PUNCHES

![Diagram of XMRO Style for Shaped Punches]

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>D</th>
<th>r1</th>
<th>L</th>
<th>W</th>
<th>R</th>
<th>H</th>
<th>J</th>
<th>K</th>
<th>S</th>
<th>G</th>
<th>E</th>
<th>SCREW SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>XMRO-10</td>
<td>10.00</td>
<td>7.75</td>
<td>44.5</td>
<td>43.7</td>
<td>9.5</td>
<td>19.0</td>
<td>7.5</td>
<td>9.0</td>
<td>12.0</td>
<td>11.1</td>
<td>26.925</td>
<td>M8</td>
</tr>
<tr>
<td>XMRO-13</td>
<td>13.00</td>
<td>9.25</td>
<td>50.8</td>
<td>50.0</td>
<td>12.7</td>
<td>19.0</td>
<td>6.5</td>
<td>12.0</td>
<td>15.2</td>
<td>14.3</td>
<td>29.970</td>
<td>M8</td>
</tr>
<tr>
<td>XMRO-16</td>
<td>16.00</td>
<td>10.75</td>
<td>54.0</td>
<td>53.2</td>
<td>14.3</td>
<td>19.0</td>
<td>6.0</td>
<td>13.5</td>
<td>16.8</td>
<td>15.9</td>
<td>31.750</td>
<td>M8</td>
</tr>
<tr>
<td>XMRO-20</td>
<td>20.00</td>
<td>12.75</td>
<td>60.3</td>
<td>59.5</td>
<td>17.5</td>
<td>19.0</td>
<td>5.0</td>
<td>16.5</td>
<td>20.0</td>
<td>17.5</td>
<td>33.530</td>
<td>M10</td>
</tr>
<tr>
<td>XMRO-25</td>
<td>25.00</td>
<td>15.25</td>
<td>69.9</td>
<td>69.1</td>
<td>22.2</td>
<td>23.8</td>
<td>7.0</td>
<td>22.0</td>
<td>24.7</td>
<td>19.8</td>
<td>40.640</td>
<td>M12</td>
</tr>
</tbody>
</table>