## Typical application



## Hardness checking guidelines


$150 \mathrm{Kg} . \mathrm{C}$ scale load No

If checking hardness of core pins, do not use method "NO" above, since it will provide an inaccurately low reading. The preferred method is to stand the pin on its head and check the cut end using the A scale, 60 Kg . load as shown above.

## PRECAUTIONS:

The cut end must be parallel to head end, with stem length of 2" minimum. Use cutting fluid to avoid overheating and localized annealing. Position indentation in middle of pin diameter.

## Recommended Heat Treatment to Annealed Heads

(Air Hardening Hotwork Die Steel)

## For Cooling in Air:

Heat to $1800^{\circ} \mathrm{F}$ and cool.

## Tempering:

Heat to $900^{\circ}-1100^{\circ} \mathrm{F}$
For Maximum Tempering:
Heat to $980^{\circ} \mathrm{F}$ and hold for 2 hours.
NOTE: Avoid exposure to carburizing atmosphere or compounds.


- Precision made of superior quality hotwork die steel standard hardness 30-35 HRc
- Heads are hot-forged for uniform grain flow, higher tensile strength, then annealed to permit easier machining and stamping
- +.001"/-.000" tolerance on pin diameter ensures a close fit
for coring purposes
- Pin body and head are finish ground
- Centerless ground and polished outer diameter

| $\begin{aligned} & \text { ITEM } \\ & \text { PREFIX* } \end{aligned}$ | $\begin{aligned} & \text { G } \\ & \text { PIN } \\ & \text { DIA } \end{aligned}$ |  | $\begin{gathered} \text { HEAD } \\ \text { DIAA } \end{gathered}$ | $\begin{aligned} & \text { K } \\ & \text { HEAD } \\ & \text { THICK } \end{aligned}$ | M-3** | M-6 | M-10 | M-14 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C7 | 3/32 | (.093) | 1/4 | 1/8 |  |  |  |  |
| C8 | 7/64 | (.109) | 1/4 | 1/8 |  |  |  |  |
| C9 | 1/8 | (.125) | 1/4 | 1/8 |  |  |  |  |
| C10 | 9/64 | (.140) | 1/4 | 1/8 |  |  |  |  |
| C11 | 5/32 | (.156) | 9/32 | 5/32 |  |  |  |  |
| C12 | 11/64 | (.171) | 11/32 | 3/16 |  |  |  |  |
| C13 | 3/16 | (.187) | 3/8 | 3/16 |  |  |  |  |
| C14 | 13/64 | (.203) | 3/8 | 3/16 |  |  |  |  |
| C15 | 7/32 | (.218) | 13/32 | 3/16 |  |  |  |  |
| C17 | 1/4 | (.250) | 7/16 | 3/16 |  |  |  |  |
| C19 | 9/32 | (.281) | 7/16 | 1/4 |  |  |  |  |
| C21 | 5/16 | (.312) | 1/2 | 1/4 |  |  |  |  |
| C23 | 11/32 | (.343) | 9/16 | 1/4 |  |  |  |  |
| C25 | 3/8 | (.375) | 5/8 | 1/4 |  |  |  |  |
| C27 | 13/32 | (.406) | 11/16 | 1/4 |  |  |  |  |
| C29 | 7/16 | (.437) | 11/16 | 1/4 |  |  |  |  |
| C31 | 15/32 | (.468) | 3/4 | 1/4 |  |  |  |  |
| C33 | 1/2 | (.500) | 3/4 | 1/4 |  |  |  |  |
| C35 | 9/16 | (.652) | 13/16 | 1/4 |  |  |  |  |
| C37 |  | (.325) | 7/8 | 1/4 |  |  |  |  |
| C41 | 3/4 | (.750) | 1 | 1/4 |  |  |  |  |

*See page 10 "To create Item Numbers"
**Heads of 3"-length pins are not annealed. If annealed heads on 3 "-length pins are required, they must be special ordered. (Alternately, you may purchase 6 " pins and cut to required length.)

