

N10E/1.1545/C105U



+48 801 00 31 31  
akrostal@akrostal.pl

NAZWA GATUNKU: N10E/1.1545/C105U

NAZWA: NON-ALLOYED COLD WORK TOOL STEEL

NORM: PN-84/H-85020

## APPLICATION

Steel susceptible to hand operated metal cutting tools, steel files, metal working tools (with a low machinability), metal tools for millstone and grindstone dressing, knife sharpening tools, clamp rings for pipes, paper knives and engraving tools.

## CHEMICAL COMPOSITION:

| C         | Si        | Mn        | P         | S         | Cr       | Mo | W | V | Cu       | Ni       |
|-----------|-----------|-----------|-----------|-----------|----------|----|---|---|----------|----------|
| 0,95-1,04 | 0,15-0,30 | 0,15-0,30 | Max 0,020 | Max 0,020 | Max 0,15 | -  | - | - | Max 0,20 | Max 0,20 |

## MECHANICAL PROPERTIES:

| Hardness after                     | Tempering °C | Symbol | Value    |
|------------------------------------|--------------|--------|----------|
| Soft annealing                     | -            | HB     | Max. 197 |
| Quenching with 760-780 °C in water | -            | HRC    | 62       |

## TECHNOLOGICAL TREATMENT PROCESSES:

| Technological treatment processes |                | Possible application  | Temperature, °C |
|-----------------------------------|----------------|-----------------------|-----------------|
| Hot forming                       | Forging        | +                     | 1000-800        |
|                                   | Rolling        |                       |                 |
| Treatment                         | Heat treatment | Quenching             | 760-780         |
|                                   |                | Tempering             | 180-300         |
|                                   | Annealing      |                       | 600-700         |
|                                   | Soft annealing | Above A <sub>c1</sub> | 730-760         |
|                                   |                | Below A <sub>c1</sub> | 680-710         |
| Thermochemical treatment          | Nitriding      | -                     | -               |
|                                   | Other          | -                     | -               |