

NEW STANDARDIZED CRIMPING DIE-SETS

IMPROVED PERFORMANCE & RELIABILITY WITH A MORE ROBUST ASSEMBLY PROCESS

Manuli Hydraulics is globally renowned for the quality, performance and reliability of its hydraulic connectors. However, even the best products can still be made better and as technologies develop there is often the opportunity to further improve our products.

In order to further improve the hose crimping process all Manuli Hydraulics crimping machines will have an upgraded set of dies according to our new standardization program.

FEATURES:

- Improved precision of crimping in the small size range - reduced stresses due to improved deformation of the ferrule during crimping
- Number of dies in the 10mm to 24mm range increased from 6 to 8, with 4 new sizes included
- Simplification of the assembly process by removing the need for a -0.4mm metal-rebound tolerance

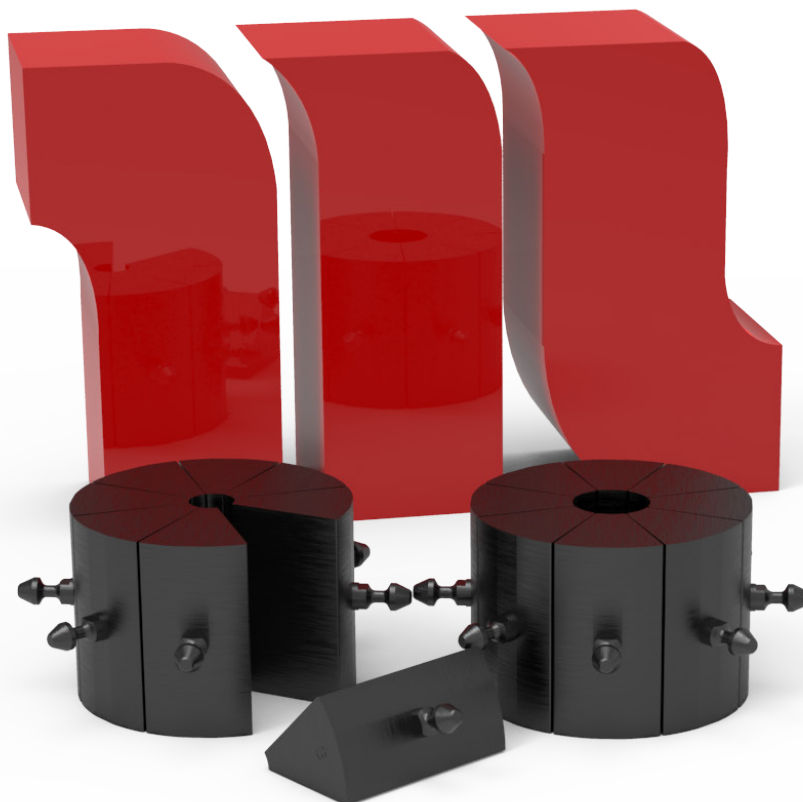
The standardized die set sequence will be as follows:

10, 12, **14, 16**, 18, **20, 22**, 24, 27, 30, 33, 36, 39, 42, 45, 48, 51, 54, 57, **63**, 66, 70, 73

Note: *New die sizes are shown in RED.*

All future crimping data provided by Manuli Hydraulics will reference the standardized die sets only.

Ordering information for the new die sets can be found on the following page.



Kit Part Number	Kit Contents	Machine Series
ESA3110N140501	Kit 3 die sets (16 20 27)	80/110 series
ESA3110NH80KT7J	Kit 7 die sets (16 18 20 22 24 27 30)	80/110 series

ESA3220NTKIT4JA	Kit 4 Die sets (16 20 27 33)	137 series
ESA3220NTKIT5JB	Kit 5 Die sets (16 20 27 33 39)	137 series
ESA3220NKIT6JA	Kit 6 Die sets (16 18 20 27 33 39)	137 series
ESA3220NTKIT6JG	Kit 6 Die sets (16 18 20 22 27 30)	137 series
ESA3220NTKIT7JA	Kit 7 Die sets (16 18 20 27 33 39 45)	137 series
ESA3220NTKIT9JA	Kit 9 Die sets (16 18 20 24 27 33 39 45 48)	137 series
ESA3220N137KT9J	Kit 9 Die sets (16 18 20 24 27 30 33 39 48)	137 series
ESA3220N137KT11J	Kit 11 Die sets (16 18 20 22 24 27 30 33 39 45 48)	137 series
ESA3220N137KT15J	Full Kit 15 Die sets (14 16 18 20 22 24 27 30 33 36 39 42 45 48 51)	137 series

ESA3330NTKIT8JG	Kit 8 Die sets (16 18 20 22 27 30 36 42)	240 series
ESA3330NTKIT9J	Kit 9 Die sets (16 18 20 22 24 27 33 39 45)	240 series
ESA3330NTKIT11J	Kit 11 Die sets (16 18 20 22 24 27 33 39 45 51 57)	240 series
ESA3320N240KT13J	Kit 13 Die sets (16 18 20 22 24 27 30 33 39 45 51 57 66)	240 series
ESA3320N240KT19J	Kit 19 Die sets (14 16 18 20 22 24 27 30 33 36 39 42 45 48 51 57 63 66 70)	240 series
ESA3320NTKIT16JUSA	Kit 16 Die sets (16 18 20 22 24 27 30 33 36 39 42 45 48 51 57 66)	MB 240 EVO USA

ESA3330NTKIT10JG	Kit 10 Die sets (16 18 20 22 27 30 36 42 48 51)	350 series
ESA3330NTKIT12J	Kit 12 Die sets (16 18 20 22 24 27 33 39 45 51 57 66)	350 series
ESA3330N340KT14J	Kit 14 Die sets (16 18 20 22 24 27 30 33 39 45 51 57 66 73)	350 series
ESA3330N340KT21J	Kit 21 Die sets (14 16 18 20 22 24 27 30 33 36 39 42 45 48 51 57 63 66 70 73 76)	350 series

ESA3330N450KT14J	Kit 14 Die sets (16 18 20 22 24 27 30 33 39 45 51 57 66 73)	GC 420 / GC 450
ESA3330N450KT21J	Full Kit 21 Die sets (14 16 18 20 22 24 27 30 33 36 39 42 45 48 51 57 63 66 70 73 76)	GC 420 / GC 450
ESA3320NTKIT19JUSA	Kit 19 Die sets (16 18 20 22 24 27 30 33 36 39 42 45 48 51 57 63 66 70 73)	GC 420 EVO USA

ESA3330N200KT9	KIT 9J Die sets (16 18 20 22 24 27 33 39 45)	MS 200
ESA3330N200KT11J	KIT 11J Die sets (16 18 20 22 24 27 30 33 39 45 48)	MS 200
ESA3330N200KT14J	KIT 14J Die sets (14 16 18 20 22 24 27 30 33 36 39 42 45 48)	MS 200

ESA3430NT320KIT13J	Kit 13 Die sets (16 18 20 22 24 27 30 33 39 45 51 57 66)	MS 320
ESA3540N320KT21J	Kit 21 Die sets (14 16 18 20 22 24 27 30 33 36 39 42 45 48 51 57 63 66 70 73 76)	MS 320

ESA3540N480KT14J	Kit 14 Die sets (16 18 20 22 24 27 30 33 39 45 51 57 66 73)	MS 480
ESA3540N480KT21J	Kit 21 Die sets (14 16 18 20 22 24 27 30 33 36 39 42 45 48 51 57 63 66 70 73 76)	MS 480