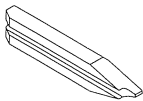


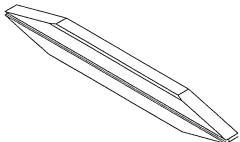
## Toolings

### Standard toolings

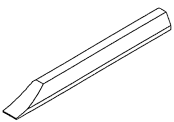
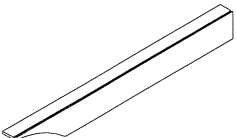
Part name	Wire diameter range	Item number	Remarks
Feed roller 	Flat 0.40/0.60	24X652-F040	Manufactured after order is received
	Flat 0.50/0.50	24X652-F050	Manufactured after order is received
	Flat 0.80/1.00	24X652-F080	Manufactured after order is received
	Flat 1.05/1.05	24X652-F105	Manufactured after order is received
	0.50/0.60	24X652-5060	
	0.55/0.65	24X652-5565	
	0.70/0.80	24X652-7080	
	0.75/0.85	24X652-7585	
	0.90/1.00	24X652-9010	
	1.10/1.20	24X652-110120	
	1.30/1.40	24X652-130140	
	1.50/1.60	24X652-150160	

**ORII&MEC** CLS-16 II Model 1610 Version

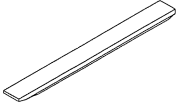
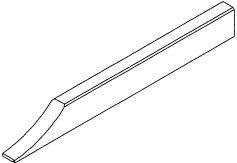
Part name	Wire diameter range	Item number	Remarks
Inlet guide 	Flat	34X775-F	Used simultaneously with inlet guide groove
	1.1	34X775-0510	Used with wire diameter of $\varnothing 1.0$ or less
	1.7	34X775-1116	Used with wire diameter between $\varnothing 1.10$ and 1.60

Part name	Wire diameter range	Item number	Remarks
Middle guide 	Flat	71X442-F	
	0.5	71X442-050	
	0.6	71X442-060	
	0.65	71X442-065	
	0.7	71X442-070	
	0.8	71X442-080	
	0.9	71X442-090	
	1.0	71X442-100	
	1.1	71X442-110	
	1.2	71X442-120	
	1.3	71X442-130	
	1.4	71X442-140	
	1.5	71X442-150	
	1.6	71X442-160	

**ORII&MEC** CLS-16 II Model 1610 Version

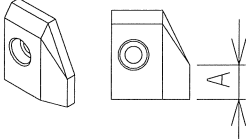
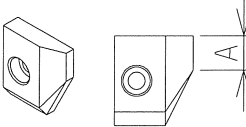
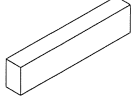
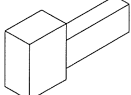
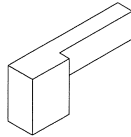
Part name	Wire diameter range	Item number	Remarks
Right wire guide (flat) 	0.5 to 09	17X630-RF0509	
	1.0 to 1.6	17X630-RF1016	
Part name	Wire diameter range	Item number	Remarks
Right wire guide (groove) 	0.5	17X630-R050	
	0.55	17X630-R055	
	0.6	17X630-R060	
	0.65	17X630-R065	
	0.7	17X630-R070	
	0.75	17X630-R075	
	0.8	17X630-R080	
	0.85	17X630-R085	
	0.9	17X630-R090	
	1.0	17X630-R100	
	1.1	17X630-R110	
	1.2	17X630-R120	
	1.3	17X630-R130	
	1.4	17X630-R140	
	1.5	17X630-R150	
	1.6	17X630-R160	

**ORII&MEC** CLS-16 II Model 1610 Version

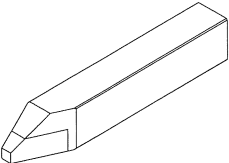
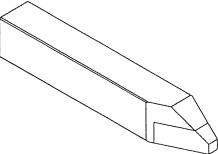
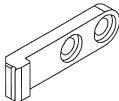
Part name	Wire diameter range	Item number	Remarks
Left wire guide (flat) 	0.5 to 09	17X630-LF0509	Manufactured after order is received
	1.0 to 1.6	17X630-LF1016	Manufactured after order is received
Part name	Wire diameter range	Item number	Remarks
Left wire guide (groove) 	0.5	17X630-L050	Manufactured after order is received
	0.6	17X630-L060	Manufactured after order is received
	0.7	17X630-L070	Manufactured after order is received
	0.8	17X630-L080	Manufactured after order is received
	0.9	17X630-L090	Manufactured after order is received
	1.0	17X630-L100	Manufactured after order is received
	1.1	17X630-L110	Manufactured after order is received
	1.2	17X630-L120	Manufactured after order is received
	1.3	17X630-L130	Manufactured after order is received
	1.4	17X630-L140	Manufactured after order is received
	1.5	17X630-L150	Manufactured after order is received
	1.6	17X630-L160	Manufactured after order is received



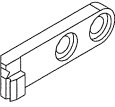
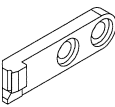
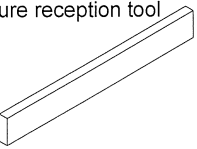
**ORII&MEC** CLS-16 II Model 1610 Version

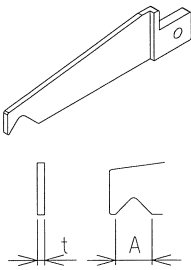
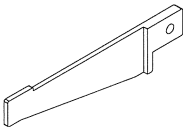
Part name	A dimension	Item number	Remarks
Right pitch tool 	5 mm	17X631-R05	
	10 mm	17X631-R10	
Part name	A dimension	Item number	Remarks
Left pitch tool 	5 mm	17X631-L05	Manufactured after order is received
	10 mm	17X631-L10	Manufactured after order is received
Part name	Standard dimensions	Item number	Remarks
Arbor 	6x5	18X607-0605F	Used in two locations.
	6x10	18X607-0610F	
Part name	Standard dimensions	Item number	Remarks
Right large arbor 	10x20	17X632-R1020	
Part name	Standard dimensions	Item number	Remarks
Left large arbor 	10x20	17X632-L1020	Manufactured after order is received

**ORII&MEC** CLS-16 II Model 1610 Version

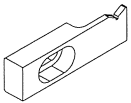
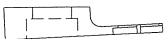

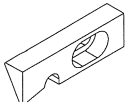
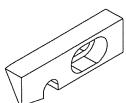
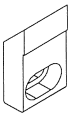
Part name	Wire diameter range	Item number	Remarks
Right cutter tool 		17X633-R	
Part name	Wire diameter range	Item number	Remarks
Left cutter tool 		17X633-L	Manufactured after order is received
Part name	Wire diameter range	Item number	Remarks
T.A. point 	0.5	34X781-050	
	0.55	34X781-055	
	0.6	34X781-060	
	0.65	34X781-065	
	0.7	34X781-070	
	0.75	34X781-075	
	0.8	34X781-080	
	0.85	34X781-085	
	0.9	34X781-090	
	0.95	34X781-095	Manufactured after order is received
	1.0	34X781-100	
	1.1	34X781-110	
	1.2	34X781-120	
	1.3	34X781-130	
	1.4	34X781-140	
	1.5	34X781-150	
	1.6	34X781-160	

**ORII&MEC** CLS-16 II Model 1610 Version

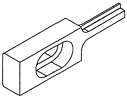
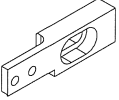
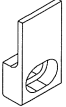

Part name	Wire diameter range	Item number	Remarks
Right T.A. point (for solid body flexure) 	0.5	34X781-R050	
	0.55	34X781-R055	
	0.6	34X781-R060	
	0.65	34X781-R065	
	0.7	34X781-R070	
	0.75	34X781-R075	
	0.8	34X781-R080	
	0.85	34X781-R085	
	0.9	34X781-R090	
	1.0	34X781-R100	
	1.1	34X781-R110	
	1.2	34X781-R120	
	1.3	34X781-R130	
	1.4	34X781-R140	
	1.5	34X781-R150	
	1.6	34X781-R160	
Part name	Wire diameter range	Item number	Remarks
Left T.A. point (for 3-dimensional bending) 	0.5	34X781-L050	Manufactured after order is received
	0.55	34X781-L055	Manufactured after order is received
	0.6	34X781-L060	Manufactured after order is received
	0.65	34X781-L065	Manufactured after order is received
	0.7	34X781-L070	Manufactured after order is received
	0.75	34X781-L075	Manufactured after order is received
	0.8	34X781-L080	Manufactured after order is received
	0.85	34X781-L085	Manufactured after order is received
	0.9	34X781-L090	Manufactured after order is received
	1.0	34X781-L100	Manufactured after order is received
	1.1	34X781-L110	Manufactured after order is received
	1.2	34X781-L120	Manufactured after order is received
	1.3	34X781-L130	Manufactured after order is received
	1.4	34X781-L140	Manufactured after order is received
	1.5	34X781-L150	Manufactured after order is received
	1.6	34X781-L160	Manufactured after order is received
Part name	Wire diameter range	Item number	Remarks
Flexure reception tool 		17X634	Coiling unit use

Part name	Standard dimensions	Item number	Remarks
Clamp tool V groove 	t2xA8	17X641-2008	Manufactured after order is received; applicable outer diameter $\varnothing 3$ to $\varnothing 8$
	t2xA15	17X641-2015	Manufactured after order is received; applicable outer diameter $\varnothing 7$ to $\varnothing 12$
	t2xA26	17X641-2026	Manufactured after order is received; applicable outer diameter $\varnothing 11$ to $\varnothing 16$
	t3xA8	17X641-3008	Applicable outer diameter $\varnothing 3$ to $\varnothing 8$
	t3xA15	17X641-3015	Applicable outer diameter $\varnothing 7$ to $\varnothing 12$
	t3xA26	17X641-3026	Applicable outer diameter $\varnothing 11$ to $\varnothing 16$
	t6xA8	17X641-6008	Applicable outer diameter $\varnothing 3$ to $\varnothing 8$
	t6xA15	17X641-6015	Applicable outer diameter $\varnothing 7$ to $\varnothing 12$
	t6xA26	17X641-6026	Applicable outer diameter $\varnothing 11$ to $\varnothing 16$
Part name	Thickness t	Item number	Remarks
Flat clamp tool 	t2	17X642-F2	Manufactured after order is received
	t3	17X642-F3	
	t6	17X642-F6	

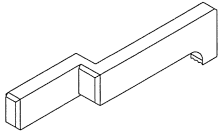
## For English Hooks

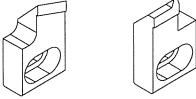

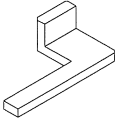
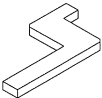
Part name	Wire diameter range	Item number	Remarks
Base tool (left/right shared) 	0.80 to 0.50	18X609-08	
Part name	Wire diameter range	Item number	Remarks
Right base tool 	1.20 to 0.81	18X609-12	
	1.60 to 1.21	18X609-16	
Part name	Wire diameter range	Item number	Remarks
Left base tool 	1.20 to 0.81	17X643-L12	
	1.60 to 1.21	17X643-L16	
Part name	Wire diameter range	Item number	Remarks
Right squeeze tool 	0.80 to 0.50	18X611-08	
	1.20 to 0.81	18X611-12	
	1.60 to 1.21	18X611-16	
Part name	Wire diameter range	Item number	Remarks
Left squeeze tool 	0.80 to 0.50	17X644-L08	
	1.20 to 0.81	17X644-L12	
	1.60 to 1.21	17X644-L16	
Part name	Wire diameter range	Item number	Remarks
Hook tool 		18X617	

**For U Hooks**

Part name	Wire diameter range	Item number	Remarks
U hook base tool 	0.80 to 0.50	18X613-08	
	1.20 to 0.81	18X613-12	
	1.60 to 1.21	18X613-16	
Part name	Wire diameter range	Item number	Remarks
U hook squeeze tool 	0.80 to 0.50	18X614-08	
	1.20 to 0.81	18X614-12	
	1.60 to 1.21	18X614-16	
Part name	Wire diameter range	Item number	Remarks
U-hook tool 		18X615	
Part name	Wire diameter range	Item number	Remarks
U-hook holder 		18X616	

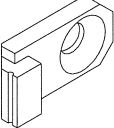
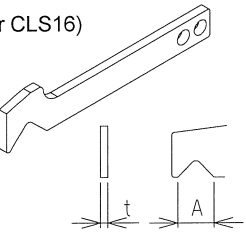
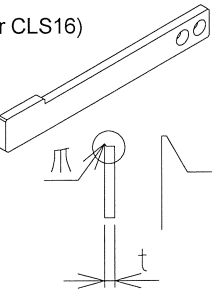
**For German Hooks**

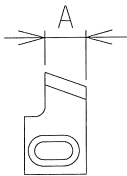
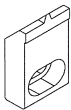
Part name	Wire diameter range	Item number	Remarks
Three-claw tool 	0.55-2 tread	17X636-2055	Manufactured after order is received
	0.6-2 tread	17X636-2060	Manufactured after order is received
	0.65-2 tread	17X636-2065	Manufactured after order is received
	0.7-2 tread	17X636-2070	Manufactured after order is received
	0.8-2 tread	17X636-2080	Manufactured after order is received
	0.9-2 tread	17X636-2090	Manufactured after order is received
	1.0-2 tread	17X636-2100	Manufactured after order is received
	1.1-2 tread	17X636-2110	Manufactured after order is received
	1.2-2 tread	17X636-2120	Manufactured after order is received
	1.3-2 tread	17X636-2130	Manufactured after order is received
	1.4-2 tread	17X636-2140	Manufactured after order is received
	1.5-2 tread	17X636-2150	Manufactured after order is received
	1.6-2 tread	17X636-2160	Manufactured after order is received
	0.5-3 tread	17X636-3050	
	0.55-3 tread	17X636-3055	
	0.6-3 tread	17X636-3060	
	0.65-3 tread	17X636-3065	
	0.7-3 tread	17X636-3070	
	0.8-3 tread	17X636-3080	
	0.9-3 tread	17X636-3090	
	1.0-3 tread	17X636-3100	
	1.1-3 tread	17X636-3110	
	1.2-3 tread	17X636-3120	
	1.3-3 tread	17X636-3130	
	1.4-3 tread	17X636-3140	
	1.5-3 tread	17X636-3150	
	1.6-3 tread	17X636-3160	

Part name	Wire diameter range	Item number	Remarks
Hook tool 	R	18X622-R	
	L	18X622-L	
Part name	Wire diameter range	Item number	Remarks
Aperture tool 		17X638	
Part name	Wire diameter range	Item number	Remarks
Bend bracket tool 	R	17X639-R	
	L	17X639-L	
Part name	Wire diameter range	Item number	Remarks
Terminal pressing tool 		17X640	




## Option toolings

Part name	Wire diameter range	Item number	Remarks
Coiling point (for CLS16)	0.5	10X120-050	
	0.55	10X120-055	
	0.6	10X120-060	
	0.65	10X120-065	
	0.7	10X120-070	
	0.75	10X120-075	
	0.8	10X120-080	
	0.9	10X120-090	
	1.0	18X605-100	
	1.1	18X605-110	
	1.2	18X605-120	
	1.3	18X605-130	
	1.4	18X605-140	
	1.5	18X605-150	
	1.6	18X605-160	
			
Part name	Standard dimensions	Item number	Remarks
Clamp tool V groove (for CLS16)	t3xA8	18X618-3008	Applicable outer diameter $\varnothing 3$ to $\varnothing 8$
	t3xA15	18X618-3015	Applicable outer diameter $\varnothing 7$ to $\varnothing 12$
	t3xA26	18X618-3026	Applicable outer diameter $\varnothing 11$ to $\varnothing 16$
	t6xA8	18X618-6008	Applicable outer diameter $\varnothing 3$ to $\varnothing 8$
	t6xA15	18X618-6015	Applicable outer diameter $\varnothing 7$ to $\varnothing 12$
	t6xA26	18X618-6026	Applicable outer diameter $\varnothing 11$ to $\varnothing 16$
			
Part name	Standard dimensions	Item number	Remarks
Flat clamp tool (for CLS16)	t3xd0.8	18X619-F308	Clawed; applicable wire diameter 0.80 to 0.50
	t3xd1.2	18X619-F312	Clawed; applicable wire diameter 1.20 to 0.81
	t3xd1.6	18X619-F316	Clawed; applicable wire diameter 1.60 to 1.21
	t3	18X619-F3D	Not clawed
	t6xd0.8	18X619-F608	Clawed; applicable wire diameter 0.80 to 0.50
	t6xd1.2	18X619-F612	Clawed; applicable wire diameter 1.20 to 0.81
	t6xd1.6	18X619-F616	Clawed; applicable wire diameter 1.60 to 1.21
	t6	18X619-F6D	Not clawed
			

Part name	A dimension	Item number	Remarks
Hook tool 	12 mm	18X612-12	
	18 mm	18X612-18	
Part name	Wire diameter range	Item number	Remarks
Hook tool 		18X622	(for German hooks)

## Cams

Part name	Wire diameter range	Item number	Remarks
Pitch cam 	60°	Y17B208	
Part name	Wire diameter range	Item number	Remarks
Pitch cam 	15°	Y17B222	
Part name	Wire diameter range	Item number	Remarks
Arbor front/rear cam 		Y17B209	