

NEW TECHNOLOGIES - HIGH QUALITY - MODERN DESIGN - RELIABILITY

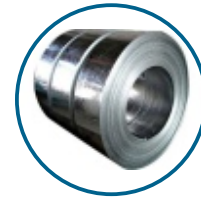
# Set of Equipment

for Organization of  
Lightweight Steel Construction Manufacture



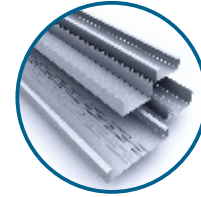
**arkada**  
engineering

**Arkada-Engineering, Ltd. Smolensk**



### Automatic Line of Length Cutting of Coiled Metal

● **Line purpose:** length cutting of coiled metal for manufacturing of strip material and rewinding of coiled metal.



### Automatic Line of Cold Roll Forming

for Manufacturing of Bearing Frame Profiles in the System of Lightweight Steel Constructions.

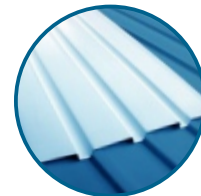
● **Line purpose:** manufacturing of bearing frame profiles in the system of Lightweight Steel Constructions.



### Automatic Line of Cold Roll Forming

for Manufacturing of Water Drain System Details

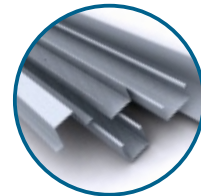
● **Line purpose:** manufacturing of profiled details – ridges, water drain system details (water pipes, trenches etc.).



### Automatic Line of Cold Roll Forming

for Manufacturing of Profiled Metal Sheet (Cladding)

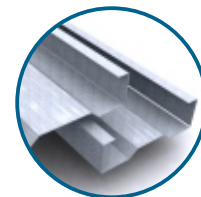
● **Line purpose:** manufacturing of profiled sheets.



### Automatic Line of Cold Roll Forming

for Manufacturing of Profiles of Building System

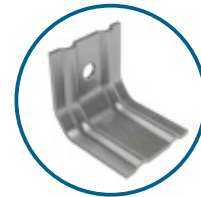
● **Line purpose:** manufacturing of building profiles.



### Automatic Line of Cold Roll Forming

for Manufacturing of Bearing Frame Profiles in the System of Lightweight Steel Constructions

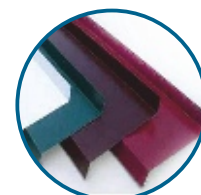
● **Line purpose:** manufacturing of bearing frame profiles in the system of Lightweight Steel Constructions.



### Automated Forming Complex

for Manufacturing of Arms of Frame of Lightweight Steel Building System

● **Complex purpose:** manufacturing of arms for frame bearing profiles in the system of lightweight steel constructions.



### Set of Equipment for Manufacturing

of Accessory Details of Drain Systems



# Automatic Line of Length Cutting of Coiled Metal

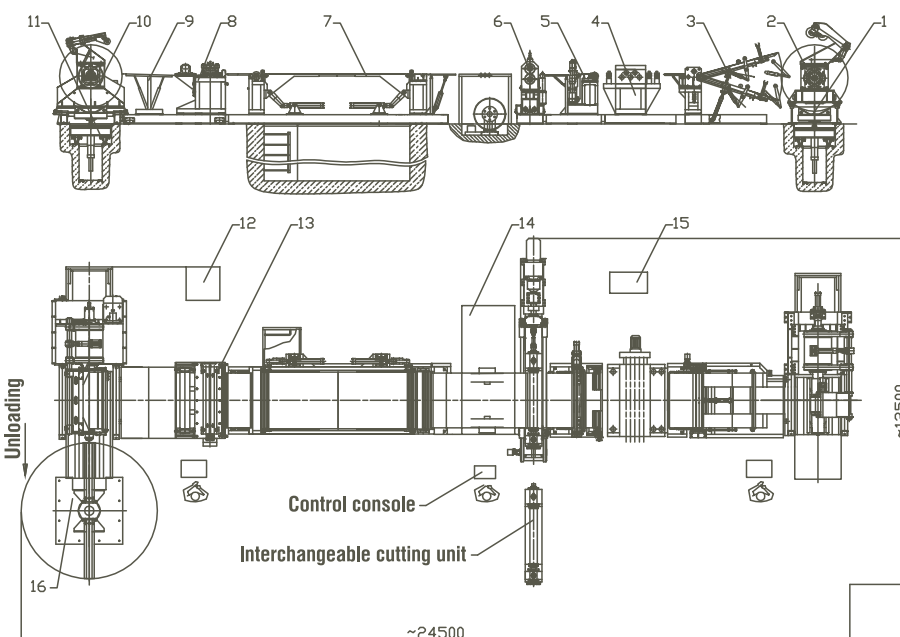


● **Line purpose:** length cutting of coiled metal for manufacturing of strip material and rewinding of coiled metal.

Material	Rolled galvanized material according to ГOCT 14918, ГOCT P 52246 Rolled galvanized lacquer coated material according to ГOCT P 52146
Minimum and maximum thickness of a tape, mm	0,5...3,0
External roll diameter, mm	1000...1600
Width of a roll, mm	800...1600
Voltage, V	380/220
Installed capacity, kW	190
Internal established roll diameter, mm	500; 600
Maximum roll weight, t	15
Maximum cutting speed, m\min	90
Maximum quantity of cuts	24
Width of the knife	20
Minimum width of a tape after cutting, mm	43
Internal roll diameter after cutting, mm	600
Accuracy of cutting (by width), mm	
for $S = 0,5 \dots 1,0$	$\pm 0,1$
for $1,0 < S \leq 3,0$	$\pm 0,2$
Weight of the Line, kg	70000

## Advantages of the Line:

- High quality of the strip
- High accuracy of cutting
- Possibility of fast transition to another cutting ticket (by changing cutting block)
- Cut strip storage facility



## ● Composition of the Line:

1. Charging device
2. Uncoiler
3. Pull-out charging table
4. Leveler
5. Transverse shears
6. Length shears
7. Looper
8. Tensioning device
9. Guiding table
10. Coiler
11. Discharging device
12. Hydraulic device
13. Pneumatic device
14. Coiling device for coiling side edge
15. Electric device
16. Discharging column



# Automatic Line of Cold Roll Forming

for Manufacturing of Bearing Frame Profiles in the System of Lightweight Steel Constructions.

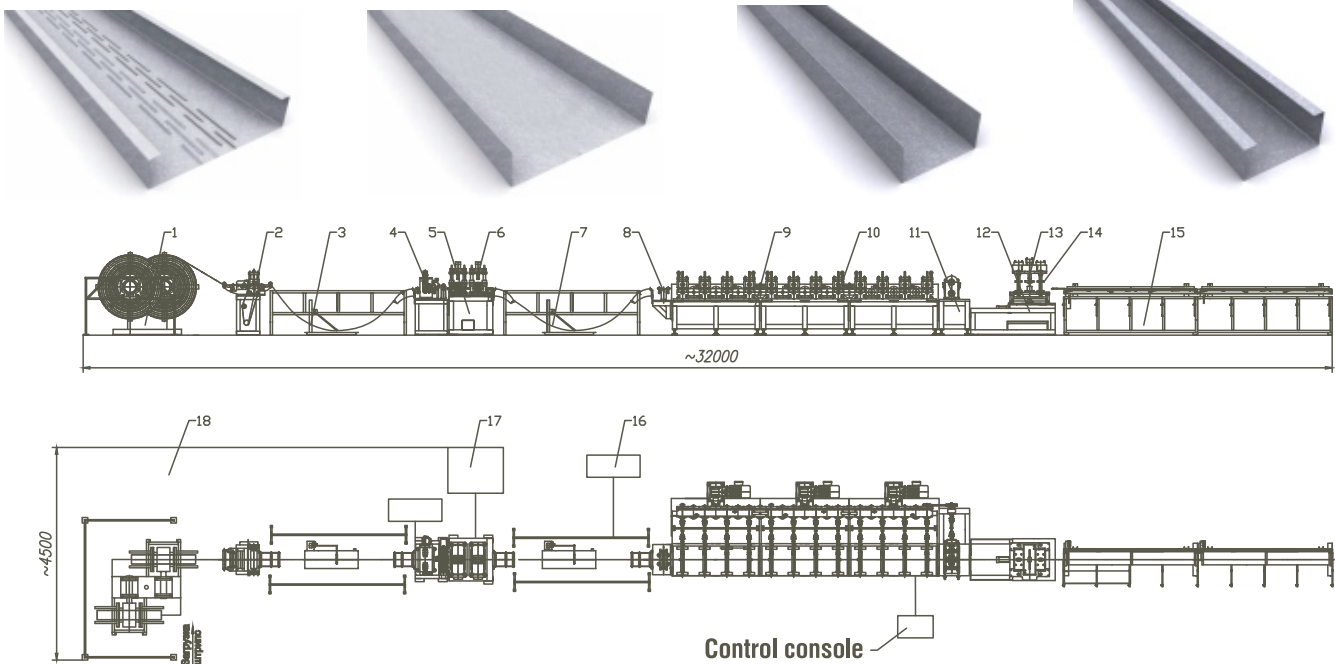


- **Line purpose:** manufacturing of bearing frame profiles in the system of Lightweight Steel Constructions.

Material	cold rolled steel tape
Thickness of a tape, mm	1,5...2,0
Width of a tape, mm	100...365
Internal roll diameter, mm	500... 600
External roll diameter, max, mm	1500
Length of profiles, variable, m	9
Production capacity (Lprofile – 3m, details\hour	300
Voltage, V	380/220
Installed capacity, kW	70
Weight of the line, approximate, kg	15000

## Advantages of the Line:

- High reliability
- High quality of manufactured profiles
- Possibility of manufacturing of different profiles by changing tool equipment

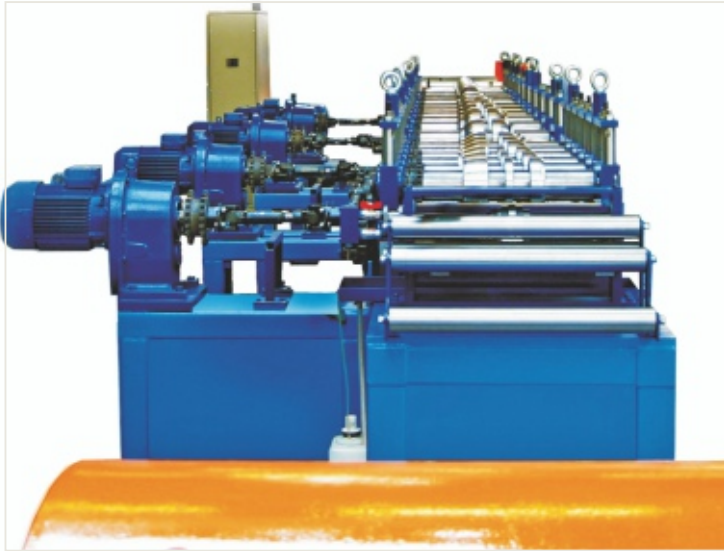


## ● Composition of the Line:

- |                            |                        |                       |   |                      |
|----------------------------|------------------------|-----------------------|---|----------------------|
| 1. Uncoiler                | 5. Traverse table      | 9. Traverse table     | 13. Power device                            | 17. Hydraulic device |
| 2. Charging device         | 6. Feeding device      | 10. Receiving block   | 14. Trimming die                            |                      |
| 3. Pull-out charging table | 7. Power device        | 11. Forming machinery | 15. Receiving device (for details Lmax-12m) |                      |
| 4. Leveler                 | 8. Piercing dies (var) | 12. Tool adjustment   | 16. Electric device.                        |                      |

# Automatic Line of Cold Roll Forming

for Manufacturing of Water Drain System Details

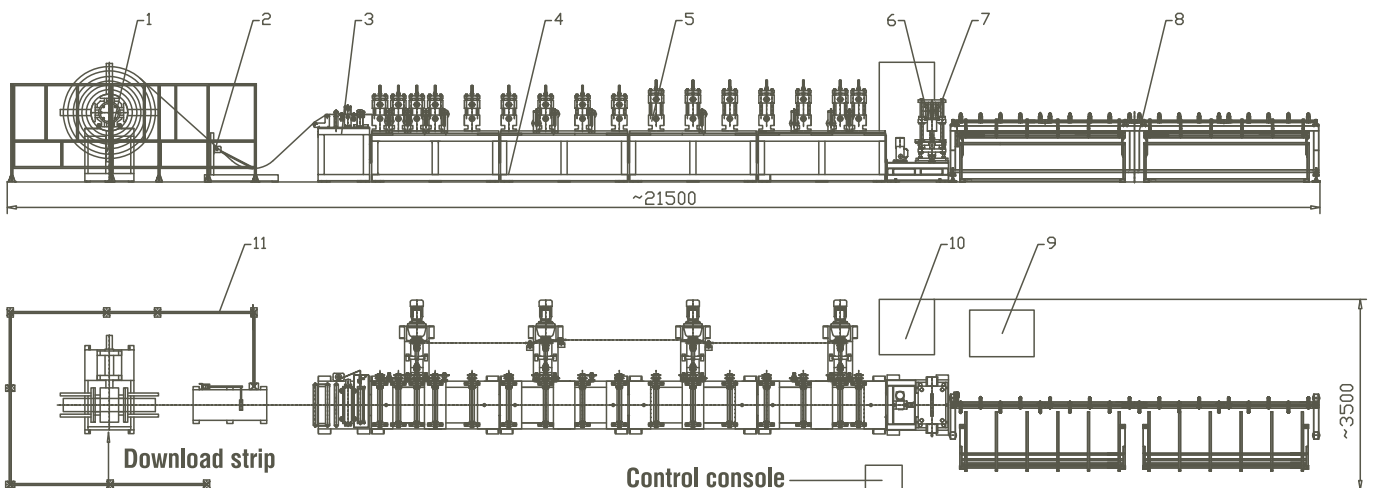


● **Line purpose:** manufacturing of profiled details – ridges, water drain system details (water pipes, trenches etc.).

Material	cut cold rolled steel tape galvanized or lacquer coated	
Thickness of a tape, mm		0,5...1,0
Width of a tape, mm		70...500
Internal roll diameter, mm		500... 600
External roll diameter, max, mm		1500
Maximum roll weight, t		2,8
Length of profiles, max, m		6
Production capacity for ridges (Ldetail – 3000mm) details\hour		50
Production capacity for water pipes, trenches (Ldetail – 3000mm) details\hour		200
Voltage, V		380/220
Installed capacity, kW		35
Weight of the Line, kg		9000

## Advantages of the Line:

- High reliability
- High quality of manufactured profiles
- High production capacity



- **Composition of the Line:**
- |                      |                    |                     |
|----------------------|--------------------|---------------------|
| 1. Uncoiler          | 5. Tool adjustment | 9. Hydraulic device |
| 2. Loop compensator  | 6. Cutting device  | 10. Electric device |
| 3. Receiving block   | 7. Cutting tool    | 11. Fence           |
| 4. Forming machinery | 8. Receiving table |                     |

# Automatic Line of Cold Roll Forming

for Manufacturing of Profiled Metal Sheet (Cladding)



● **Line purpose:** manufacturing of profiled sheets.

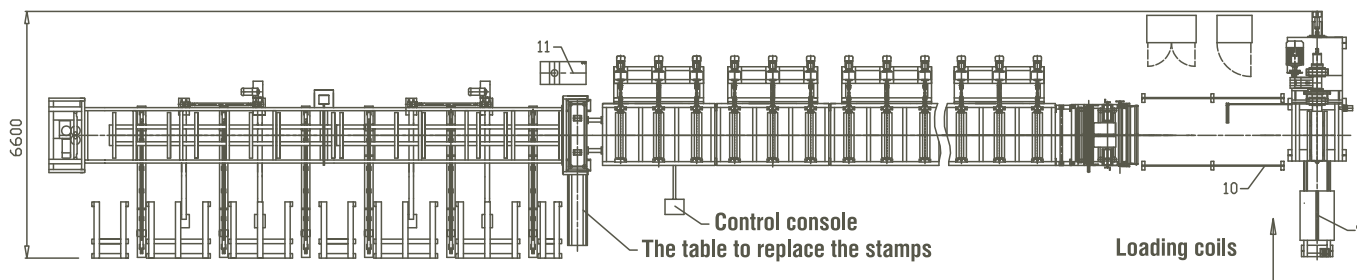
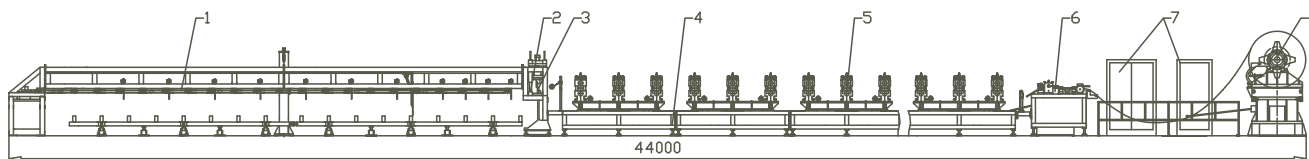
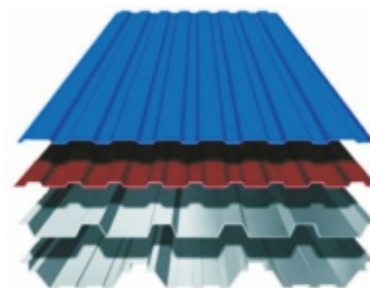
Material	galvanized or lacquer coated cold rolled steel	
Thickness of a tape, mm		0,6...0,8
Width of a tape, mm		900...1250
Internal roll diameter, mm		500; 600
External roll diameter, max, mm		1500
Maximum roll weight, t		10
Maximum corrugation height, mm		44
Length of profiles, max, m		1500...12000
Production capacity (Lsheet – 12m) run.m\min		25
Voltage, V		380/220
Installed capacity, kW		80
Weight of the Line, kg		34000

## Advantages of the Line:

- Line universality (possibility of manufacturing extensive range of profiled sheets from C8 to H153 by changing tool equipment)
- High quality of manufactured profiled sheets
- Possibility of fast transition to another profiled sheet type (by changing forming and cutting sections)

## ● Composition of the Line:

- |  |                       |
|--|-----------------------|
| 1. Palletizing machine (for profiles Lmax=13m) | 7. Electric device    |
| 2. Cutting device                              | 8. Uncoiler           |
| 3. Trimming die                                | 9. Charging device    |
| 4. Forming machinery                           | 10. Fence             |
| 5. Tool adjustment                             | 11. Hydraulic device. |
| 6. Receiving block                             |                       |





# Automatic Line of Cold Roll Forming

for Manufacturing of Profiles of Building System



● **Line purpose:** manufacturing of building profiles.

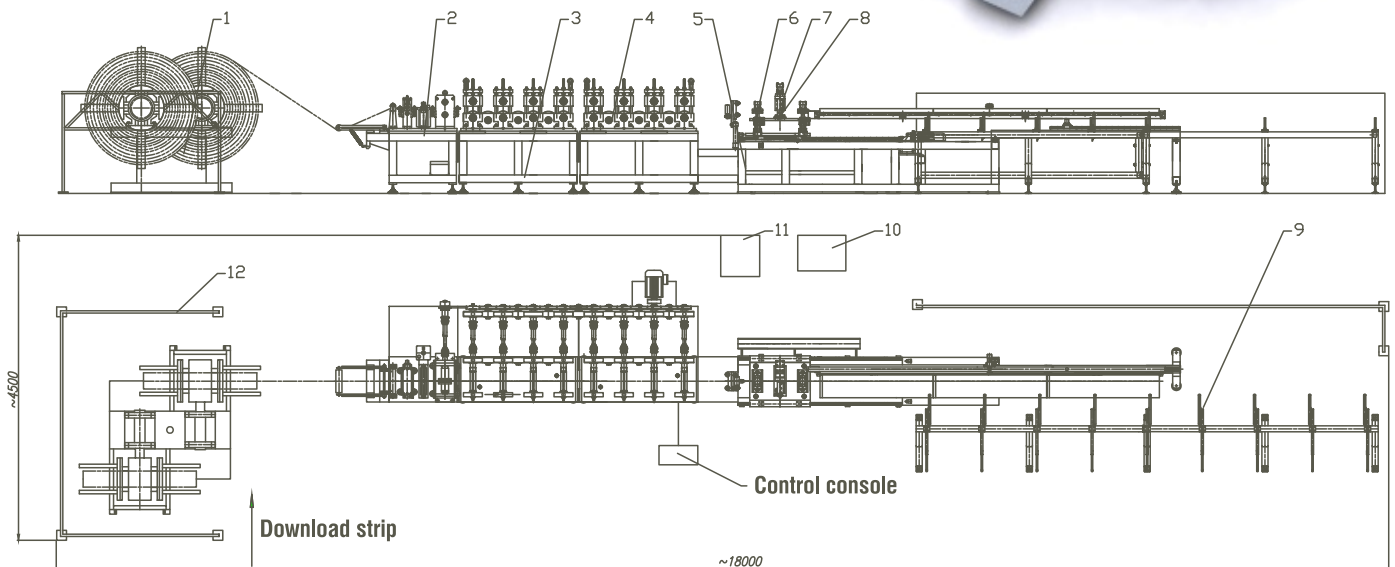
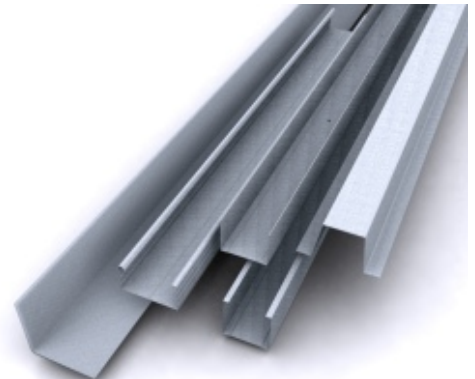
## Advantages of the Line:

- Line universality (possibility of manufacturing extensive range of profiles by changing tool equipment)
- High quality of manufactured profiles
- Possibility of fast transition to another profile type (by changing forming and cutting sections)

Material	cut galvanized steel tape according to ГОСТ 14918
Width of a tape, mm	50...210
Thickness of a tape, mm	0,4...0,6
Internal roll diameter, mm	500, 600
Mode of operation	automatic
Length of profiles, max, m	2000...3000
Production capacity (Lprofile – 3m) details\hour	1000
Voltage, V	380/220
Installed capacity, kW	23
Weight of the Line without tool set, kg	9000

## ● Composition of the Line:

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. Two-position uncoiler</li> <li>2. Receiving block</li> <li>3. Forming machinery</li> <li>4. Tool adjustment</li> <li>5. Fly cut device</li> <li>6. Punch device</li> </ol> | <ol style="list-style-type: none"> <li>7. Knife cutting device</li> <li>8. Knives</li> <li>9. Receiving table (for details Lmax=6m)</li> <li>10. Hydraulic device.</li> <li>11. Electric device.</li> <li>12. Fence.</li> </ol> |
|--|---|



# Automatic Line of Cold Roll Forming

for Manufacturing of Bearing Frame Profiles in the System of Lightweight Steel Constructions



● **Line purpose:** manufacturing of bearing frame profiles in the system of Lightweight Steel Constructions.

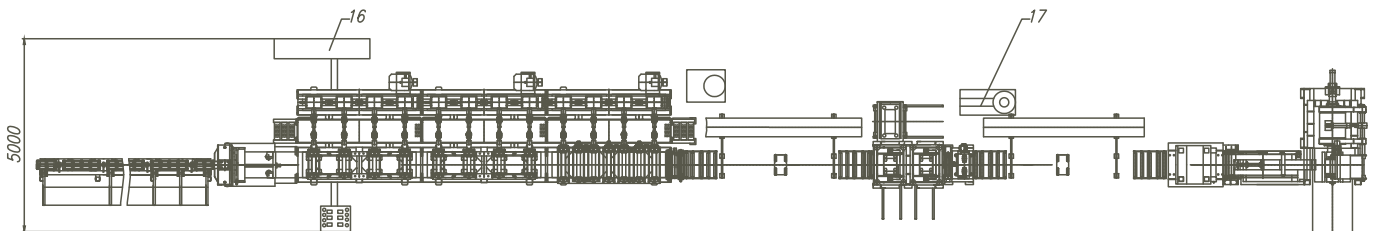
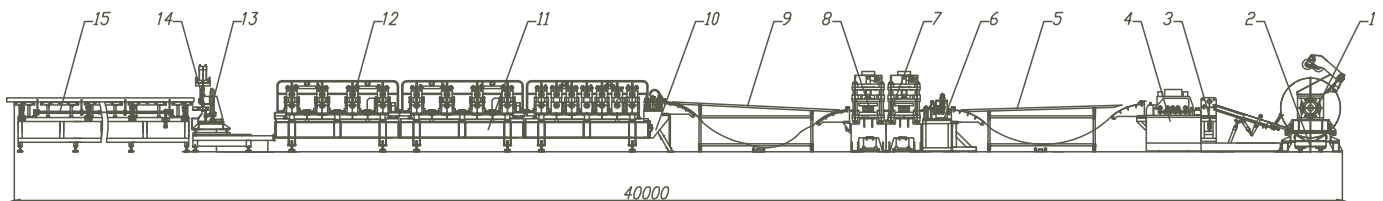
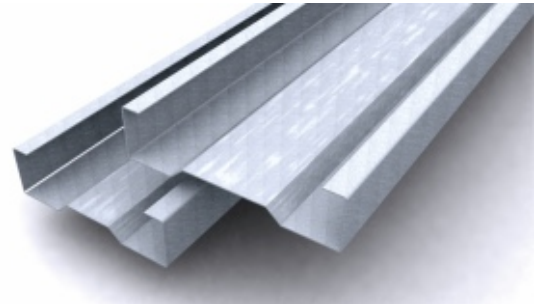
Material	cold rolled steel tape
Thickness of a tape, mm	3,0
Width of a tape, mm	200...500
Internal roll diameter, mm	500; 600
External roll diameter, max, mm	1500
Length of profiles, variable, m	1000...12000
Production capacity (Lprofile – 3m, details\hour	300
Voltage, V	380/220
Installed capacity, kW	до 100
Weight of the line, approximate, kg	20000

## Advantages of the Line:

- High reliability
- High quality of manufactured profiles
- Possibility of manufacturing of different profiles by changing tool equipment

## ● Composition of the Line:

- |                            |                        |  |
|----------------------------|------------------------|--|
| 1. Uncoiler                | 7. Power device        | 13. Power device                               |
| 2. Charging device         | 8. Piercing dies (var) | 14. Trimming die                               |
| 3. Pull-out charging table | 9. Traverse table      | 15. Receiving device<br>(for details Lmax-12m) |
| 4. Leveler                 | 10. Receiving block    | 16. Electric device.                           |
| 5. Traverse table          | 11. Forming machinery  | 17. Hydraulic device                           |
| 6. Feeding device          | 12. Tool adjustment    |  |





# Automated Forming Complex

for Manufacturing of Arms of Frame of Lightweight Steel Building System

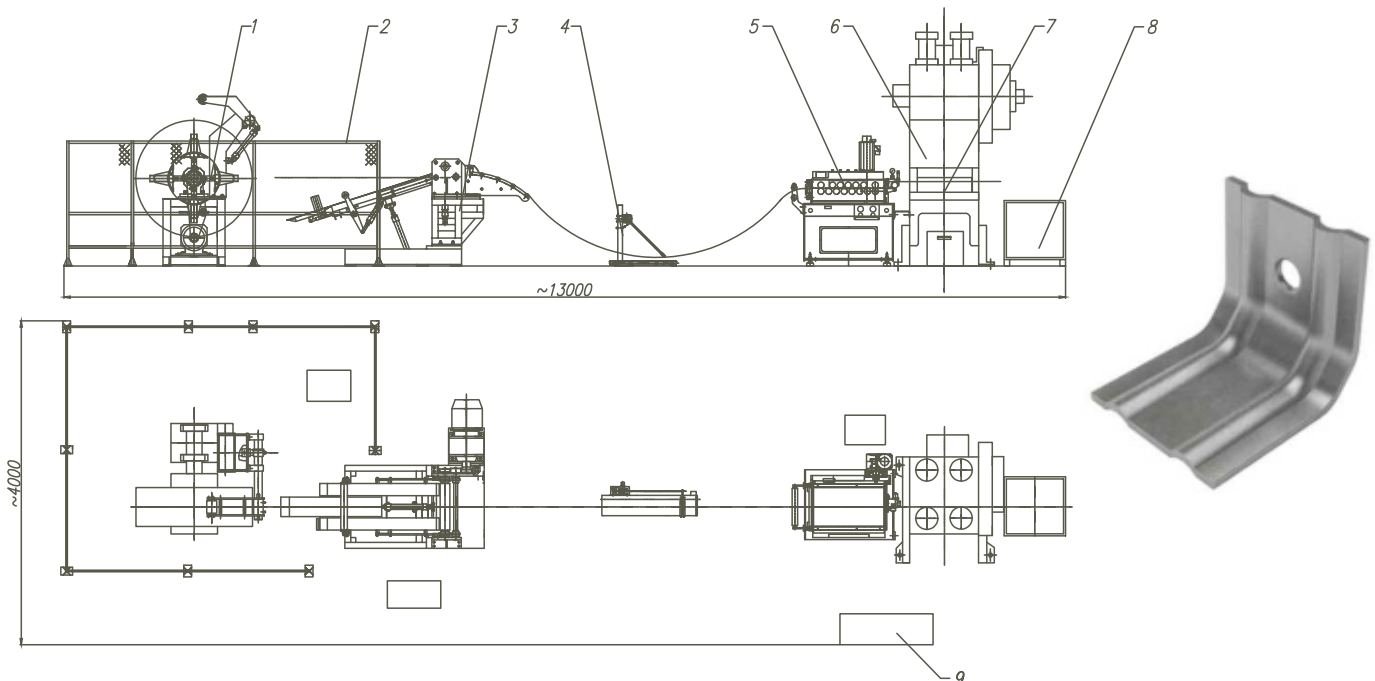


- **Complex purpose:** manufacturing of arms for frame bearing profiles in the system of lightweight steel constructions.

### Advantages of the complex:

- complex universality (possibility of manufacturing extensive range of stamped details by changing dies)
- high quality of manufactured details
- possibility of fast transition to another product type (by changing dies)

Material	cut cold-rolled steel tape galvanized or not
Width of a tape, mm	70...500
External roll diameter, mm	1500
Internal roll diameter, mm	600
Mode of operation	automatic
Step accuracy of leveling and feeding device, mm	+/- 0,1
Production capacity, details\min	30...40
Voltage, V	380/220
Installed capacity, kW	30
Weight of the complex, approximate, kg	12500



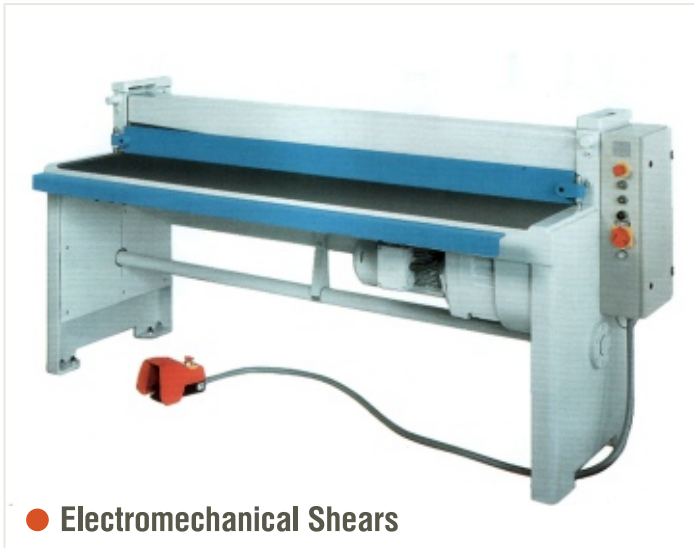
### ● Composition of the Complex:

1. Uncoiler
2. Fence
3. Pull-out charging table

4. Loop compensator
5. Leveling and feeding device
6. Press (100 t)

7. Die (var)
8. Receiving container
9. Electric device.

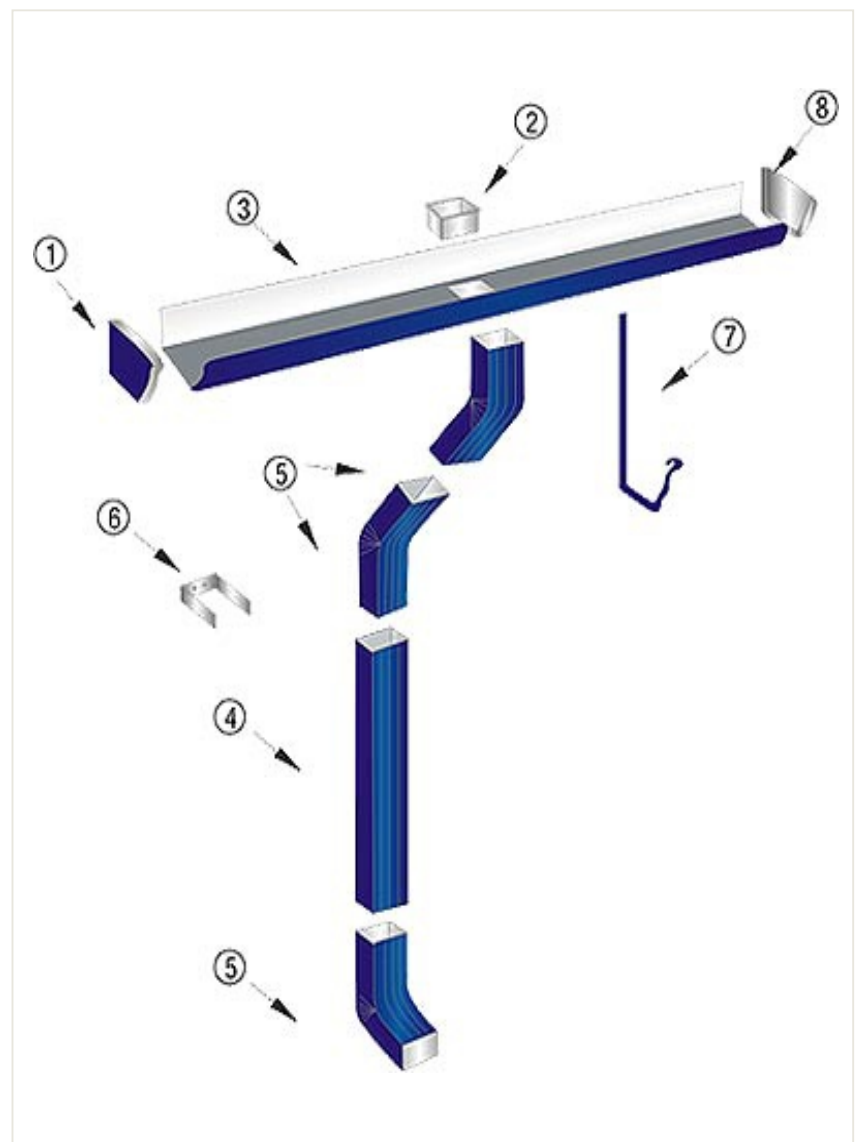
# Set of Equipment for Manufacturing of Accessory Details of Drain Systems



● Pipe Bend Details  
Manufacturing Device

The proposed set of equipment gives an opportunity to manufacture quality accessory details for a drain system of buildings efficiently and in industrial quantity.

## Drain System Structure Scheme



NEW TECHNOLOGIES - HIGH QUALITY - MODERN DESIGN - RELIABILITY

214030 Russia, Smolensk, Krasninskoe shosse, 35,  
tel./fax +7(4812) 65-26-99



**arkada**  
engineering

The logo features a stylized white 'a' inside a circle on the left, followed by the word 'arkada' in a bold, lowercase sans-serif font, and 'engineering' in a smaller, lowercase sans-serif font below it. The background of the central panel is a blue-tinted 3D rendering of various industrial metal profiles and a large circular component.

[www.arkada-rus.com](http://www.arkada-rus.com)

[okr@arkada-rus.com](mailto:okr@arkada-rus.com)