

Lacquer Changer LCLT-20K4 Inline

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1. Introduction

The APSON Lacquer Changer LCLT-20K4 Inline is a modular expandable switching unit for pressurized chemically aggressive work materials, e.g. paints, solvents, alkalis. It is an evolution of the standard lacquer changer type and belongs to the class of inline paint changers with large inline throughput for many delivery points. The paint changer consists of a maximum of 23 switching blocks. Each block is provided with **1 throughput channel (inline channel) and 4 independent output channels (A-B-C-D)**. Each output channel of a block is independent of the other output channels and can be fitted with pneumatically controlled APSON valves or APSON locking screws. This lacquer changer type is also deliverable as **piggable/newteable** execution (APSON LCLT-20K4- N, Lacquer Changer for recovering the residual amounts).

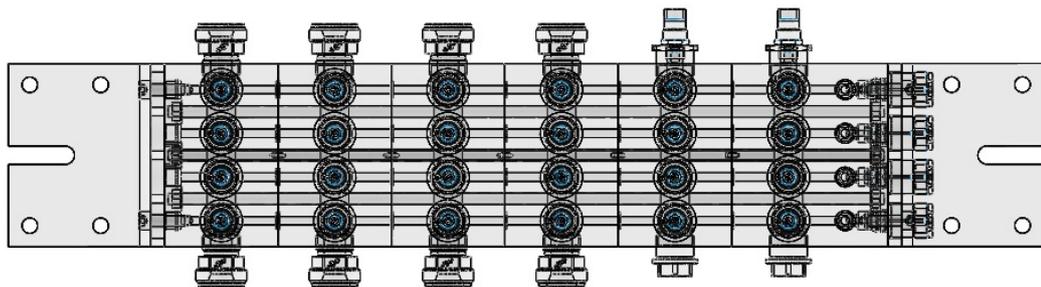


Fig. 1: APSON LCLT-20K4 Inline for 4 paints (with 1 air- and 1 dump-block)

Due to the multi-channel, economical A-B to A-B-C-D systems or special applications are realisable. All four output channels can be switched through to the same paint, or any output channel can be switched through to a different paint. The piggable execution of the paint changer allows coating processes without work breaks (back pushing of the residual quantities, flushing the lines, re-charging with new work material), because the inactive part of the system can be used for recovering the residual amounts of old paint type and for pre-charging with a new type of paint, while a different part of the system is producing.

The piggable APSON LCLT-20K4-N enables almost complete recovery of the residual amounts by back pushing the work material from the supply lines and paint changers into the supply system. It offers large material throughput and allows, due to the construction and the used dead-space-minimized APSON valve technology, very good rinsing of both, the supply lines as well as the output lines of the paint system.

2. Features

- Large inline throughput and very good rinsing, N-version is piggable.
- Environmentally friendly due to short rinsing times and work material recovery (N version)
- Modular expandable to the desired number of media (up to 23 blocks).
- Dead-space-minimized valves, and rinsing- and throughput-optimized ducts.

- Cost-saving due to 4 channels and minimal work material consumption.
- Easy handling during installation and maintenance.
- Material: Stainless steel, therefore durable and wear resistant.
- Resistant to alkalis and weak acids.

3. Structure and Function

The APSON LCLT-20K4 consists of a maximum of twenty-one 4-channel switch blocks for paint (LB), a lacquer changer end-block (special switch block, normally at upper end) for the media outlet, and a cleaner/dump group (usually at lower end). The cleaner/dump group consists of a normal switch block (AB) for supply of air and a special dump block (DB) for the supply of solvent (S) and for rinsing (dump or recycle).

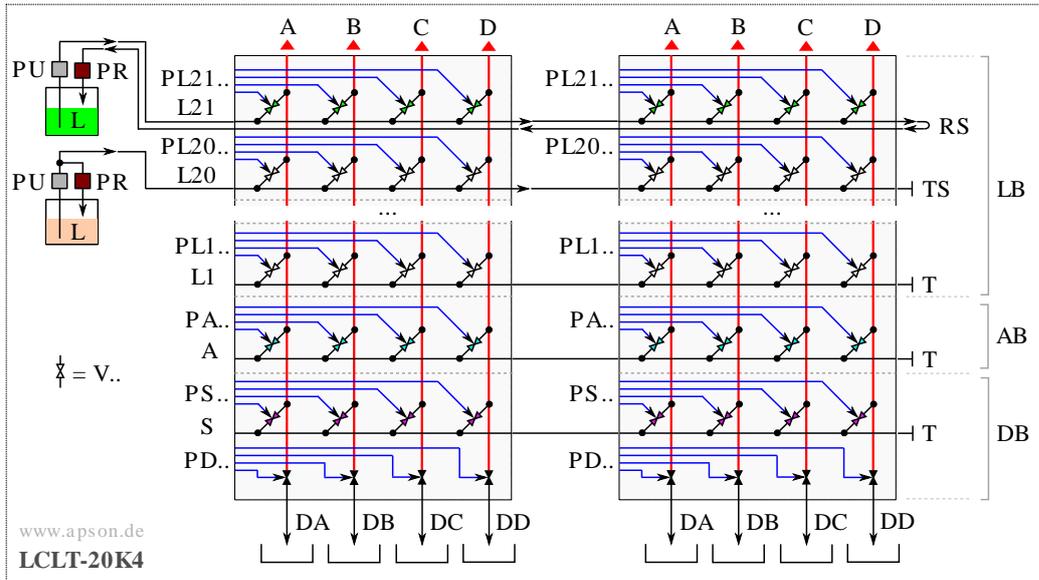


Fig. 2: APSON LCLT-20K4 -- Functional Scheme (example with 2 lacquer changers)

Legend: LB = switching blocks for paint, AB = switching block for air, DB = switching block for dump or recycling; A, B, C, D = output channels, V = 2/2-way valves, L.. = paint or work medium, PL.. = control air for lacquer valves (pneumatic), PU = pump, PR = pressure regulator / pressure limiter, RS = loop system (example for decanting work media), TS = stub system (example), T = screw plug, PA.. = control air for air (A), PS.. = control air for solvent (S), D.. = dump or recycle.

The air-block and each paint block have four screw sockets for paint valves. The dump-block has four frontal outputs, four frontal and four end-sided screw sockets for paint valves. Thus per block, four inline channels can be independently switched-through to the four output channels. The lacquer changer blocks have at one end of each output channel a seal (one per channel) for sealing of the adjacent blocks and two pins to align the blocks when assembling the lacquer changer. The components are made of stainless steel as standard.

During a rinsing cycle, the respective valves of the cleaner/dump group (AB and DB) supply several times alternately, for a short time air and solvent into the to be rinsed output channel of the switch blocks of the actual paint changer (LB).

4. Technical Data

Denomination	APSON Lacquer Changer LCLT-20K4 Inline, with cleaner/dump group, without hose and tube fittings (or according to customer's requests)
Work materials / Media	Lacquers, solvents, caustic solutions, weak acid solutions, a.o.

Number of blocks	Max. 23 blocks (max. 21 blocks for paint)
Work material pressure	Max. 15 bar
Valve assembly (optional)	APSON 2/2-Ways Valves LV 2014-6P, dead-space-minimized valve technology, arrangement and assembly according to customer's requests
Materials	Stainless steel
Seals	Viton™, or according to customer's request
Inline passages	DN20 , for pipe connections, or according to customer's requests
Connections for paint	G1", or reduced, according to customer's request
Connections for air, solvent	G1/4", for hose D = 8 mm, d = 6 mm, or according to customer's request
Dimensions of one block LxWxH [mm]	70 x 130 x 80 (without valves and fittings)
Mass	Approx. 4.9 kg per block

5. Ordering Data

Denomination	Part-Nr.
APSON Lacquer Changer LCLT-20K4 , with cleaner/dump group, without pipe and hose fittings. Number of paints or special designs according to customer's request.	050-A296
APSON Lacquer Changer LCLT-20K4-N, Piggable , with cleaner/dump group, without pipe and hose fittings. Number of paints or special designs according to customer's request.	050-A296-1
APSON 2/2-way valve lacquer LV 2014-6P (spare parts)	060-A039-6
APSON screw plug VS-2008 (spare part)	100-0886
APSON check valve (spare parts)	100-A014-5
APSON reduction G3/4" - G1/2" (spare parts)	200-0655
APSON screw plug G3/4" (spare parts)	200-0656

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