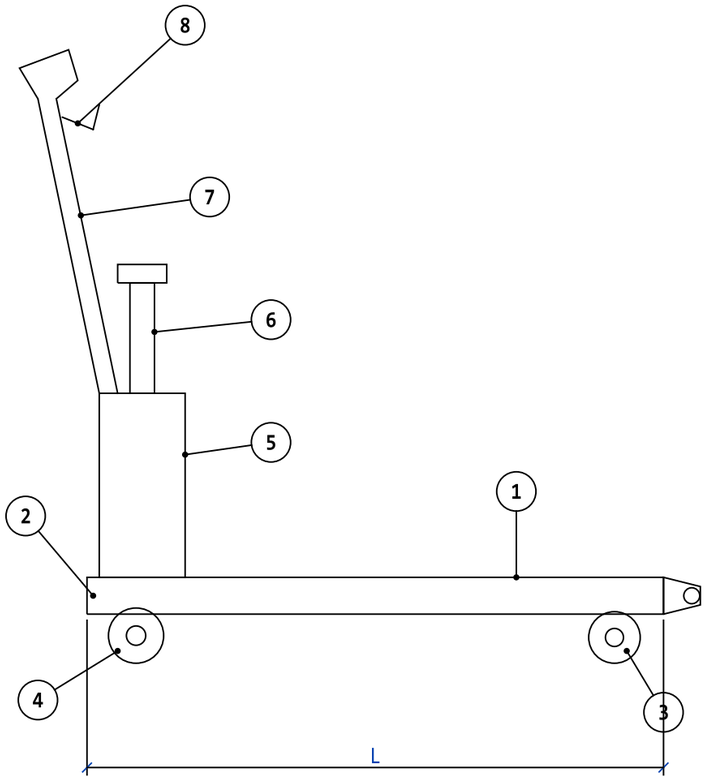
SIDE ELEVATION - HAND PALLET TRUCK

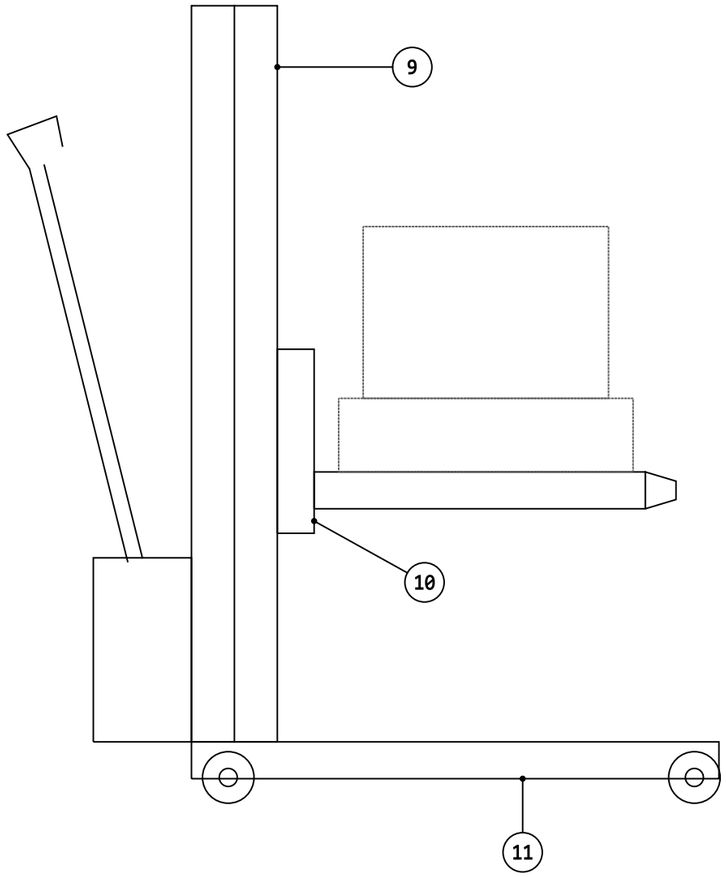
NOT TO SCALE



THE RAM LIFTS THE FORKS; THE LEVER CHOOSES RAISE, NEUTRAL OR LOWER
TAPERED TIPS AND ENTRY ROLLERS LET THE FORKS ENTER THE PALLET
L IS THE LENGTH OF THE FORKS

SIDE ELEVATION - MANUAL STACKER

NOT TO SCALE



THE MAST AND THE CARRIAGE LIFT THE PALLET HIGHER; THE LEGS STRADDLE IT
A WHEEL AT THE TIP OF EACH LEG KEEPS THE LOAD BETWEEN THE LEGS
THE RATING IS READ WITH THE LOAD CENTRE: SEE DETAIL A

NOTES

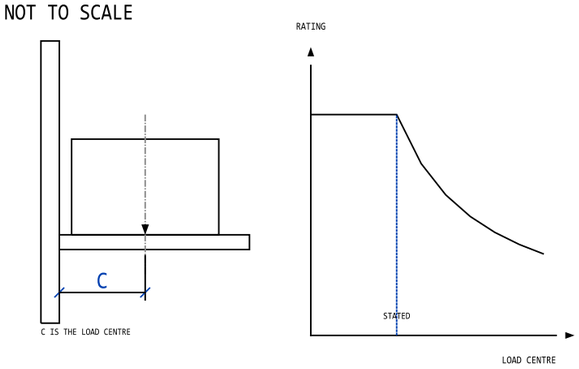
1. REFERENCE ARRANGEMENT OF A HYDRAULIC HAND PALLET TRUCK AND A MANUAL HYDRAULIC STACKER. LETTERS ARE DIMENSIONS SET BY DESIGN: NO CAPACITY, LOAD, HEIGHT, SPEED OR PRESSURE VALUE IS GIVEN.
2. THE TRUCK SHOWS THE FORKS WITH A TAPERED TIP AND AN ENTRY ROLLER, THE HEEL FRAME, A LOAD WHEEL AT THE TIP, A STEERING WHEEL AT THE HEEL, THE PUMP HOUSING WITH ITS RAM, THE HANDLE AND THE CONTROL LEVER. L IS THE LENGTH OF THE FORKS.
3. THE STACKER SHOWS THE MAST, THE CARRIAGE AND FORKS, A STRADDLE LEG WITH A WHEEL AT ITS TIP, THE PUMP HOUSING AND THE HANDLE. THE PALLET IS DASHED: IT IS NOT PART OF THE STACKER.
4. DETAIL A: C IS THE LOAD CENTRE, THE DISTANCE FROM THE FACE OF THE FORKS TO THE CENTRE OF THE LOAD. THE RATING IS GIVEN AT THE STATED LOAD CENTRE, AND IT FALLS BEYOND IT, BECAUSE THE SAME WEIGHT THEN ASKS MORE OF THE TRUCK.
5. DETAIL B: A PALLET FULLY ON THE FORKS IS CARRIED ALONG THEIR LENGTH. A PALLET ON THE TIPS ONLY BENDS THE FORKS. DETAIL C: THE TAPERED TIP AND ITS ROLLER LET THE FORK ENTER A PALLET WITHOUT CATCHING IT.
6. THE HYDRAULIC CIRCUIT AND THE LEVER ARE ON SHEET 002. THE WHEELS, THE SEALS, THE MAST CHAIN AND THE PUMP BODY ARE CATALOGUE ITEMS, BOUGHT IN.

ITEMS

ITEM	DESCRIPTION
1	FORK
2	HEEL FRAME
3	LOAD WHEEL
4	STEERING WHEEL
5	PUMP HOUSING
6	RAM
7	HANDLE
8	CONTROL LEVER
9	MAST
10	CARRIAGE
11	STRADDLE LEG

DETAIL A - THE LOAD CENTRE

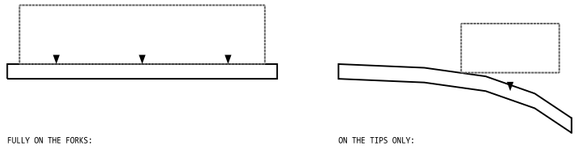
NOT TO SCALE



THE RATING IS GIVEN AT THE STATED LOAD CENTRE;
BEYOND IT THE SAME WEIGHT ASKS MORE OF THE TRUCK

DETAIL B - THE PALLET ON THE FORKS

NOT TO SCALE

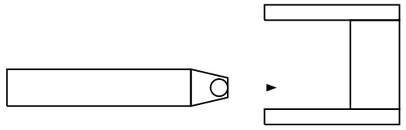


FULLY ON THE FORKS:
THE LOAD IS CARRIED ALONG THE FORK

ON THE TIPS ONLY:
THE FORK BENDS

DETAIL C - THE FORK TIP

NOT TO SCALE



THE TAPER AND THE ROLLER LET THE FORK
ENTER THE PALLET WITHOUT CATCHING IT

REFERENCE CONFIGURATION - NOT FOR CONSTRUCTION

NEOMETRIX DEFENCE LIMITED
ENGINEERED IN NOIDA - INDIA

PALLET TRUCK AND STACKER - REFERENCE CONFIGURATION

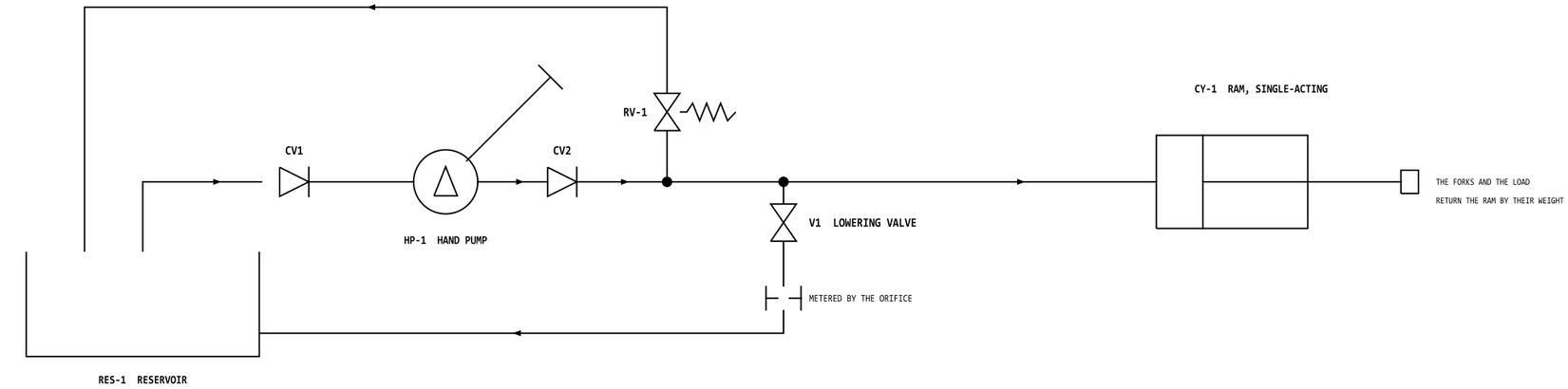
ARRANGEMENT AND DETAILS

THE TRUCK, THE STACKER, THE LOAD CENTRE AND THE FORKS

DWG NO	SCALE @ A3	SHEET	REV
NMX-PTS-102-001	NTS	1 OF 2	A
DATE	UNITS	DRAWN	STATUS
14-11-2026	TAGS ONLY	NMX-DO	REFERENCE

PALLET TRUCK - REFERENCE HYDRAULIC CIRCUIT

NOT TO SCALE - TAGS ONLY, NO PROCESS VALUES



V1 OPENS ONLY WHEN THE LEVER IS IN LOWER, AND THE ORIFICE SETS THE PACE OF THE DESCENT

RV-1 LIMITS THE PRESSURE TO THE RATING OF THE TRUCK

CV2 HOLDS THE LOAD WHILE THE HANDLE IS PUMPED BACK AND V1 STAYS CLOSED

LEGEND

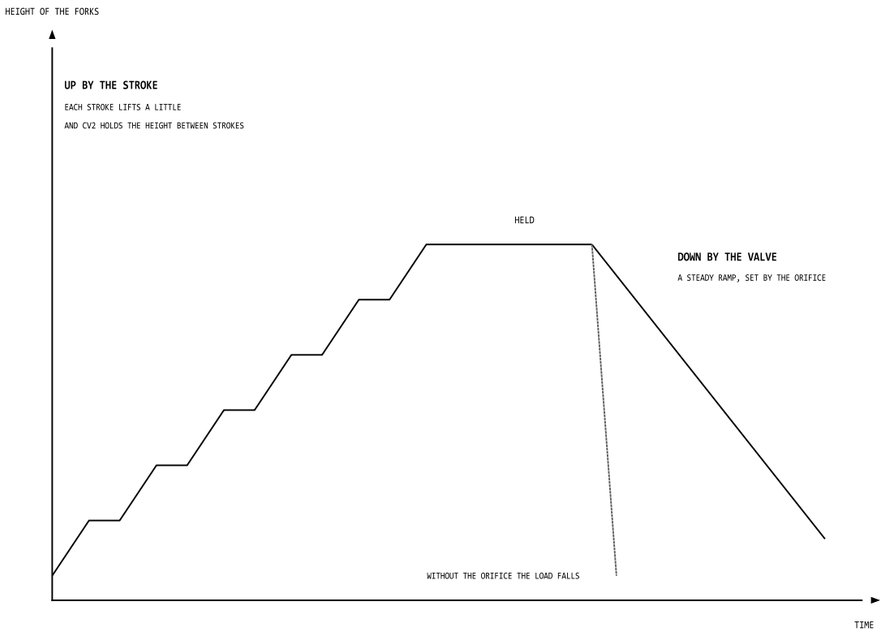


NOTES

1. REFERENCE HYDRAULIC CIRCUIT AND CONTROL LEVER OF A HYDRAULIC HAND PALLET TRUCK, DRAWN IN THE STYLE OF THE GRAPHICAL SYMBOLS OF FLUID POWER. TAGS AND LETTERS ONLY: NO CAPACITY, LOAD, HEIGHT, SPEED, TIME OR PRESSURE VALUE IS GIVEN.
2. THE HAND PUMP HP-1 DRAWS OIL FROM RES-1 THROUGH THE CHECK VALVE CV1 AND DELIVERS IT THROUGH CV2 INTO THE SINGLE-ACTING RAM CY-1. CV2 SHUTS BEHIND THE OIL, SO THE LOAD STAYS UP BETWEEN STROKES.
3. THE RELIEF VALVE RV-1 LIMITS THE PRESSURE, SO THAT A LOAD HEAVIER THAN THE TRUCK IS MEANT FOR CANNOT BURST A SEAL OR A HOSE. IT RETURNS THE OIL TO RES-1.
4. THE LOWERING VALVE V1 LETS THE OIL OUT THROUGH AN ORIFICE, SO THAT THE LOAD COMES DOWN AT A STEADY PACE AND NEVER FALLS. THE WEIGHT OF THE FORKS AND THE LOAD RETURNS THE RAM; THERE IS NO SPRING.
5. DETAIL A: THE HEIGHT OF THE FORKS AGAINST TIME. EACH STROKE LIFTS A LITTLE AND THE CHECK VALVE HOLDS THE HEIGHT WHILE THE HANDLE COMES BACK, SO THE CURVE CLIMBS IN STEPS. IT IS HELD WHILE V1 STAYS CLOSED, THEN IT FALLS AS A STEADY RAMP. THE DASHED LINE IS THE FALL THAT AN UNMETERED VALVE WOULD GIVE.
6. DETAIL B: THE CONTROL LEVER HAS THREE POSITIONS. IN NEUTRAL THE PUMP IS PARTED FROM THE RAM, SO THE HANDLE CAN BE PULLED AND PUSHED WITHOUT MOVING THE FORKS.
7. LINES THAT CROSS ARE NOT CONNECTED. A DOT SHOWS A CONNECTION. THE ARRANGEMENT AND THE DETAILS ARE ON SHEET 001. CATALOGUE ITEMS ARE BOUGHT IN.

DETAIL A - UP BY THE STROKE, DOWN BY THE VALVE

NOT TO SCALE



LIFTING TAKES MANY SMALL STROKES, AND LOWERING TAKES ONE OPENED VALVE

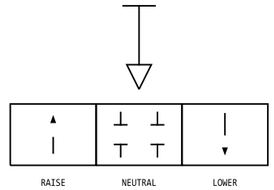
SO THE LOWERING VALVE IS METERED AND THE LOAD NEVER FALLS

WHAT EACH STEP DOES

STEP	WHAT HAPPENS
1 PUMP	EACH STROKE PUSHES OIL PAST CV1 AND CV2 INTO CY-1
2 HOLD	CV2 SHUTS BEHIND THE OIL AND V1 STAYS CLOSED
3 LOWER	V1 OPENS AND THE ORIFICE LETS THE OIL OUT STEADILY
4 OVERLOAD	RV-1 OPENS AND RETURNS THE OIL TO RES-1

DETAIL B - THE CONTROL LEVER

NOT TO SCALE



RAISE: THE HANDLE PUMPS OIL INTO THE RAM

NEUTRAL: THE PUMP IS PARTED FROM THE RAM

LOWER: V1 OPENS, AND THE ORIFICE SETS THE PACE

REFERENCE CONFIGURATION - NOT FOR CONSTRUCTION

NEOMETRIX DEFENCE LIMITED

ENGINEERED IN NOIDA - INDIA

PALLET TRUCK AND STACKER - REFERENCE CONFIGURATION

HYDRAULIC CIRCUIT AND CONTROL LEVER

UP BY THE STROKE, DOWN BY THE VALVE

DWG NO	SCALE @ A3	SHEET	REV
NMX-PTS-102-002	NTS	2 OF 2	A
DATE	UNITS	DRAWN	STATUS
14-11-2026	TAGS ONLY	NMX-DO	REFERENCE