

## Hydraulic machine of maintenance Mixer epicycloidal

### DESCRIPTION

- The hydraulic mixer epicycloidal is an hydraulic machine making it possible to carry out the hydraulic maintenance of system to hydrostatic transmission
- Support for adjustments activities, diagnosis, replacement of failing hydraulic components and improvement of the system
- Machine being able to be used only or joined with crusher MMH 101 and MMH 103
- The machine is delivered supplements, instrumented, with technical handbook and practical work.
- Material of industrial type.
- Teaching concerned: Maintenance of the industrial systems and complementary mentions in hydraulics



- for obtaining the nominal conditions of walk of the machine.
- Diagnosis and replacement of hydraulic and electrohydraulic components failing
- Implementation of measures of the characteristics flow and pressure for activities of adjustment and diagnosis
- Modification of the hydraulic installation for improvement of the operation of the machine

## Technical description and activities of maintenance on mixer:

### Structure

- Aluminum Frame anodized on wheels with brake section 90 \* 45mm
- Structure of the system of sheet steel mixer/assemblies screwed and welded
- Supplements with protected openings coupled to security chains of the machine
- Cylindrical Hopper with horizontal axis of capacity 500L approximately

### Mechanical description of the system of malaxation:

- Gravitating Food of the broyat
- 2 rotors equipped with blades
- system with planetary movement/standard epicyclic gear
- 2 trees ensuring guidance in rotation of the rotors gone up together on 2 concentric plates guided in rotation by ball bearings
- hopper acting as reserve of 500L approximately, dynamic accumulation for control of the management of flows

### Mechanical description of the evacuation of the broyats:

- 1 rotor equipped with a Archimedes' screw located along a generator of the hopper and allowing to evacuate the totality of the volume of broyat contained in the hopper
- device of coupling to press MMH 103 or a vat of substitution
- transmission of power by chains and pinions.

### Sensors:

- Pressure gauge pressure controller for detection of surpression and blocking of the mixer
- 2 inductive Sensors for velocity measurement of rotation of the crusher
- module and detection velocity measurement of direction of rotation

### Supervision (option):

- visualization of the state of the pre-actuators
- representation by diagrammatic hydraulics and emulation of magelis posting
- complete piloting/started/put moving of the machine
- reading of instantaneous measurements number of revolutions

### Electric structure:

- general disconnecting switch of power supply
- standard module of safety PREVENTA coupled with the sensors of safety and emergency stop
- circuit breaker and differentials for protection
- piloting of the machine since the button manufacture located on the box
- posting number of revolutions on desk
- piloting, parameter setting and assistance with the diagnosis by standard IHM magelis
- Schneider automat with analogical chart
- control speed per automat
- possibility of substituting this direct order by order since supervision/connection on standard connector sub D for locking on box (RS485)

### Description of the hydraulic components in initial version:

- 1 power station with engine 5,5 kw/all hydraulic components of the power station apparent
- tank of 100L
- 1 pump with variable cubic capacity 12cm<sup>3</sup>/hand drive operation of flow + direction of walk (for mixer)
- 1 pump of cramming 4cm<sup>3</sup> approximately integrated into the principal pump
- 1 hydraulic engine on mixer
- group of sweeping (hydraulically-operated distributor 3/3 closed center)
- valves anti return on system of cramming
- 1 pump on engine 0,75kW for pilot circuit of the flow
- 1 hydraulic actuating cylinder race 150mm gone up on lever for integration of an hydraulic function of piloting of the flow
- 1 distributor 4/3 for piloting of the jack

### Activities for functioning crusher only or in line (any defective or replacement material are provided)

- Integration of a whole of components (distributor, jack and flexible devices) to carry out malaxation uninterrupted as well as the controlled piloting number of revolutions of the mixer in the 2 directions of walk.
- Replacement of failing distributor 4/3)
- Integration and/or adjustment of the flow controls valve allowing to stabilize the control the speed of the mixer

**UTILITIES:** Electricity: 400 VAC will tetra/20 A mini - 50Hz  
**VOLUME Of INSTALLATION WRAPS NET (LxIxh in mm):**  
2200x1100x1900/weight 500kg