

Section 5.19

AFCP Weft automatic Feed Motion (Option)

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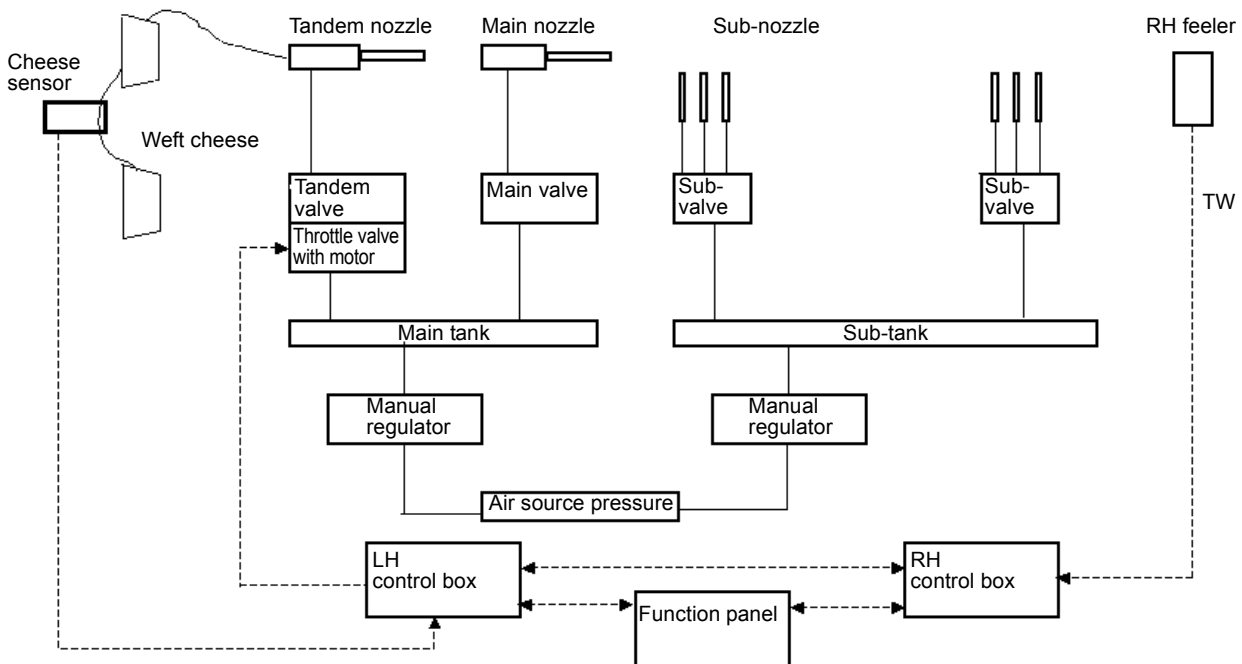
5.19 AFCP (Weft automatic Feed Motion)

The AFCP (Weft Automatic Feed Control Motion) (option) initializes the tandem valve restriction upon weft cheese change in addition to the AFC function for tandem valve control so as to match the weft arrival timing (TW) with the target value.

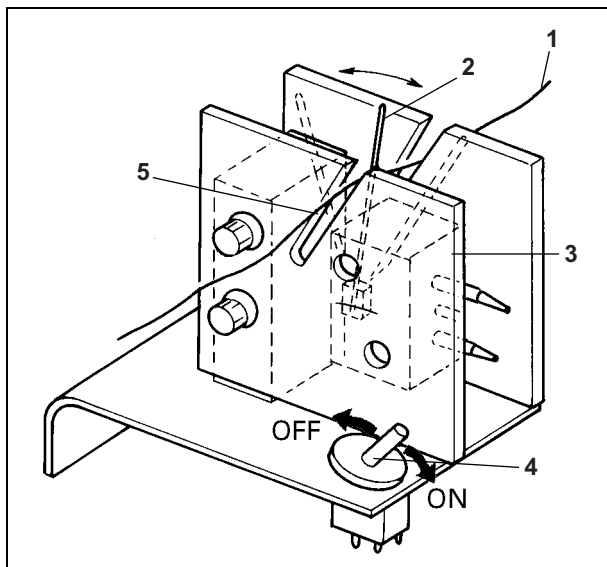
This eliminates instability of weft feeding immediately after cheese change.

5.19.1 AFCP System Configuration

[1] AFCP system configuration



[2] Cheese change detection



Yarn end 1 of the weft cheese is pulled to ascend the slope of groove 5 when it comes to the knot portion of the cheese.

As the result, sensor lever 2 of limit switch 3 above the yarn turned clockwise to turn the limit switch signal ON to initialize the tandem valve restriction.

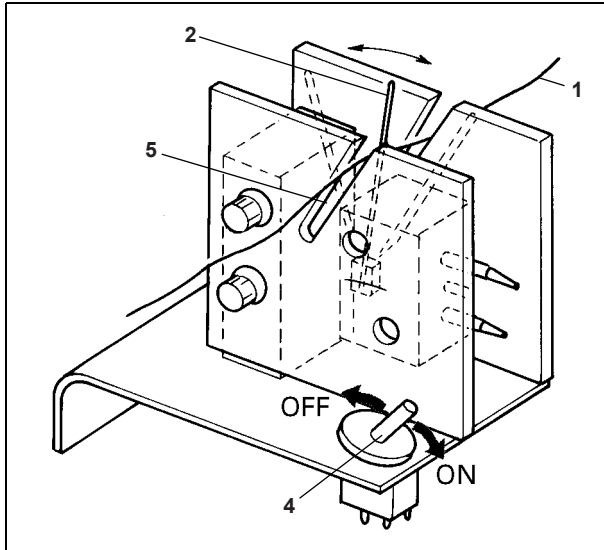
5.19.2 AFCP Setting Procedure

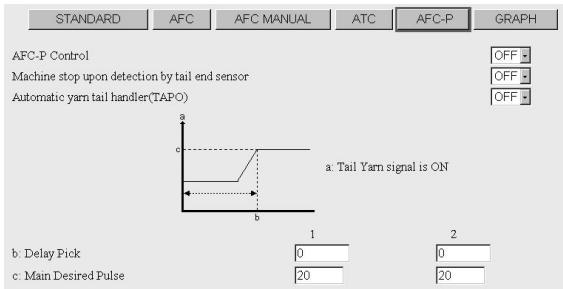
The AFCP always works together with the AFC (weft automatic feed control) (Refer to Section 5.18.)

After completing all of the settings for the AFC, proceed to AFCP setting procedure given below.

[1] Setting of cheese sensors

- 1) Pass yarn end **1** of the weft cheese through groove **5** of the cheese sensor.
- 2) Set each cheese sensor so that a yarn end coming up to sensor lever **2** moves lever **2** to provide the signal output.
When replacing cheeses by hand, turn off switch **4**. After tying yarn ends together, be sure to turn on the switch.





[2] Function panel setting related to AFCP

Setting is possible on the screen opened by [FIXER] – [MENU] – [TW CTRL].

(1) AFCP related setting

Touch the [AFC-P] switch to display the screen shown at left. The meaning of each setting value is as follows:

- AFC-P control:
Set to On to use the AFCP.
- Stop upon detection by yarn end sensor
Set to ON to initialize the tandem restriction by stopping the loom when the cheese sensor signal is input.
Set to OFF to initialize the tandem restriction with the loom kept operated when the cheese sensor signal is input.
- Yarn end automatic treatment
Set to ON to initialize the tandem restriction by stopping the loom when the cheese sensor signal is input. Then a given amount of knot is discharged to the TAPO duct. This is an option exclusively for the TAPO specification.
- Delay pick
After the cheese sensor signal input, the tandem restriction initialized with the delay for the input number of picks.
This value varies with the number of preliminary winding on the drum, number of windings per pick, and the change in restriction.
Normally set 0.
It generally takes about 500 ms to change the restriction by 60 pulses.
- Main target pulses
Input the number of pulses as the target at initialization. The tandem restriction is changed to attain this target value after the cheese sensor signal input.