Criteria for the $\tilde{C}$-integral

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Abstract. The C-integral was introduced by B. Bongiorno as a minimal constructive integration process of Riemann type which contains the Lebesgue integral and the Newton integral. B. Bongiorno, Di Piazza and Preiss gave some criteria for the C-integrability. The $\tilde{C}$-integral was introduced by D. Bongiorno as a minimal constructive integration process of Riemann type which contains the Lebesgue integral and the improper Newton integral. She gave some criteria for the $\tilde{C}$-integrability. On the other hand, Nakanishi gave some criteria for the restricted Denjoy integrability. Kawasaki and Suzuki gave new criteria for the C-integrability in the style of Nakanishi. In this paper we will give new criteria for the $\tilde{C}$-integrability in the style of Nakanishi.